

GUM ARABIC C F D A # 71-15)

A RABIC

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Compound Report No. 5

STUDY OF MUTAGENIC EFFECTS OF GUM ARABIC (FDA No. 71-15)

Prepared for:

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Submitted by:

G. W. Newell and W. A. Maxwell

Approved by:

  
W. A. Skinner, Executive Director  
Life Sciences Division

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## INTRODUCTION

Under contract to the Food and Drug Administration, Stanford Research Institute is examining the mutagenicity of 14 selected chemical compounds (Contract No. FDA 71-267). This report describes the results of tests conducted on Gum Arabic (FDA No. 71-15).

Three methods are used for evaluating the genetic hazards of the test compounds. These are: (1) Host-Mediated Assay, (2) Cytogenetic Assay, and (3) Dominant Lethal Gene Test. Methodologies used to conduct these tests were described in detail in "Compound Report No. 1," January 1972. The same procedures were followed in obtaining the information presented in this report.

For the compound being considered here--and as will be the case for the remaining 11 compounds--single and repeated oral administrations were performed at three concentrations. These amounts were (1) a maximum tolerated dose or 5 g/kg, whichever was lower, (2) a low dose of 30 mg/kg or one near the use level, and (3) a level intermediate between the use level and the maximum tolerated dose.

## SUMMARY

### Host-Mediated Assay

Gum arabic (71-15) did not produce any measurable mutagenic response or alteration in the recombination frequency for Saccharomyces cerevisiae in either the host-mediated assay or the associated in vitro tests.

### Cytogenetic Assay

A slight adverse effect on the metaphase chromosomes of rats fed gum-arabic at a concentration of 5.0 g/kg and 2.5 g/kg is produced at 6 hours. A similar effect is manifested in in vitro tissue culture tests on human embryonic lung cells at all concentrations, particularly the intermediate dose.

### Dominant Lethal Gene Test

No consistent responses occurred to suggest that gum arabic is mutagenic to the rat as a result of this experimental procedure. The positive reference control compound, TEM, produced mutagenic responses from the second through the fifth weeks of the experiment, which is characteristic of this known mutagen at the dosage used.

## RESULTS AND DISCUSSION

### Host-Mediated Assay

Table 1 presents a summary of the host-mediated assay results for gum arabic (71-15). Table 2 contains the data obtained on each individual mouse. This table is a computer printout of the calculations made on the data obtained for each mouse. Because of the nature of the computer, it is necessary to exceed its maximum number of significant figures to obtain a value as an exponent. For this reason, 12 significant figures are printed. However, only three significant figures are used for calculations and reporting the results as summarized in Table 1. Table 3 summarizes the data obtained in the in vitro tests.

As can be seen from the results summarized in Table 1, no mutagenic response was observed for the two Salmonella typhimurium strains tested when mice were treated with the test compound. The mitotic recombination frequency of Saccharomyces cerevisiae was not affected. Similarly, no positive mutagenic response was detected in the in vitro tests.

### Cytogenetic Assay

With one exception, Compound 71-15 generally exhibits no adverse effect on bone marrow metaphase chromosomes. Table 4 indicates that a moderate effect is produced by the intermediate (5.3%) and maximal (5.2%) doses at 6-hour sacrifice compared with the negative control (0.7%). At 24 and 48 hours and in the subacute study, the doses used exhibit effects in the same range or below that of the controls. The cause of the elevated negative control value at 24 hours is not known, but percentages for the other doses at this time are sufficiently lower, so that any adverse effect is probably not being masked.

Table 5 does not reveal any general trends for particular dose levels with respect to time. The negative control value rises sharply between 6 and 24 hours but declines after that. The low dose value fluctuates regularly. The intermediate and maximal dose values are elevated at 6 hours, with the intermediate dose value declining and leveling off and the maximal dose value becoming very low after that time.

The only effect, then, seems to be an early one elicited by the two highest dose levels. It is the result of an increased number of breaks and not of rearrangements.

The anaphase data given in Table 6 reveal elevated values for the three test dosage levels, although only the intermediate dose value is

markedly higher than the negative control. All three levels show the same increase over the negative control with respect to the numbers of bridges observed. Only the intermediate dose, however, greatly exceeds the negative control in the percentage of cells with acentric fragments, which, together with the increased percentage of cells with bridges, results in its overall greater effect compared with the negative control. One noteworthy feature of the anaphase data is the continuous increase in the percentage of cells containing more than one type of aberration as the maximal level is approached. This indicates a greater number of breaks occurring within any one cell with the increased dose level. In general, then, Compound 71-15 exerts a slight adverse effect on human embryonic lung cells (WI-38).

#### Dominant Lethal Gene Test

Single and multiple dose LD<sub>50</sub> values are presented in Table 7. Ten g/kg of bodyweight of gum arabic given orally as a suspension in water caused neither deaths nor adverse effects; it did cause transient depression of the animals for a few hours following dosing. Multiple doses of 5 g/kg/day for five days, given orally as partial suspensions, caused no observable effects. Thus, the treatment levels for gum arabic in these mutagenic assays were 30 mg/kg (low dose) given orally as a solution in water, 2.5 g/kg (mid-dose) administered orally as a partial suspension in water, and 5 g/kg (high dose) given orally as a partial suspension in water.

In Table 8, summary data of the average implantations per pregnant female showed that gum arabic had no effect on this parameter for either single- or multiple-dosed groups. This parameter was only minimally affected for the TEM-treated group, showing a significant drop in implants at the fourth week.

Dead implants per pregnant female are summarized in Table 9. The TEM-treated group was markedly affected from the second through the fifth week. The high dose group (5 g/kg) at 5 weeks showed a significant increase in dead implants per pregnant female for males singly treated with gum arabic. This parameter showed no statistical difference from the controls throughout the remainder of the study.

Similar types of scattered responses were obtained in statistical treatment of: dead implants per total implants (see Table 10), corpora lutea per pregnant female (see Table 11), and pre-implantation loss per pregnant female (see Table 12).

Careful review and statistical treatment of the data do not show  
gum arabic to be a mutagen in the rat by the dominant lethal gene test.

*W.A. Maxwell*

W. A. Maxwell, Ph.D., Microbiologist  
Life Sciences Division

*G.W. Newell*

G. W. Newell, Ph.D., Manager  
Chemical and Environmental Toxicology

TABLE 1

HOST-MEDIATED ASSAY  
SUMMARY OF DATA

Compound No.: 71-15 (Gum Arabic)

A. Acute

Treatment	Organism					
	Salmonella			Saccharomyces		
	G <small>10</small>	MFt/ MFc	TA 1550	D-5	RF	RFT/ RFe
MF	MFt/ MFc	MF	MFt/ MFc	RF	RFT/ RFe	
Maximum	1.45x10 <sup>-6</sup>	0.88	2.13x10 <sup>-7</sup>	1.01	1.22x10 <sup>-4</sup>	1.33
Intermediate	1.23x10 <sup>-6</sup>	0.75	1.66x10 <sup>-7</sup>	0.79	5.20x10 <sup>-5</sup>	0.57
Low Level	2.06x10 <sup>-7</sup>	0.12	1.47x10 <sup>-7</sup>	0.70	8.13x10 <sup>-5</sup>	0.89
Control (+)	1.86x10 <sup>-5</sup> ✓	11.27	1.68x10 <sup>-6</sup> ✓	7.96	1.13x10 <sup>-3</sup> ✓	12.36
Control (-)	1.65x10 <sup>-6</sup> ✓	1.00	2.11x10 <sup>-7</sup> ✓	1.00	9.14x10 <sup>-5</sup> ✓	1.00

B. Subacute

Treatment	Organism					
	Salmonella			Saccharomyces		
	G <small>10</small>	MFt/ MFc	TA 1550	D-5	RF	RFT/ RFe
MF	MFt/ MFc	MF	MFt/ MFc	RF	RFT/ RFe	
Maximum	1.93x10 <sup>-8</sup>	1.74	6.85x10 <sup>-8</sup>	0.76	8.57x10 <sup>-5</sup>	1.30
Intermediate	1.67x10 <sup>-8</sup>	1.50	1.19x10 <sup>-7</sup>	1.33	1.17x10 <sup>-4</sup>	1.78
Low Level	9.15x10 <sup>-9</sup>	0.82	1.41x10 <sup>-7</sup>	1.57	9.17x10 <sup>-5</sup>	1.40
Control (-)	1.11x10 <sup>-8</sup> ✓	1.00	8.97x10 <sup>-8</sup> ✓	1.00	6.57x10 <sup>-5</sup> ✓	1.00

Table 2

HOST MEDIATED ASSAY  
INDIVIDUAL MOUSE DATA

Compound No.: 71-15 (Gum Arabic)

Organism: G-46

Treatment: (+) CONTROL

A. Acute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.17583333333ex 05	.78500000000ex 09	.223991507430ex-04
2	.10300000000ex 05	.67833333330ex 09	.151842751843ex-04
3	.87000000000ex 04	.89000000000ex 09	.977528089887ex-05
4	.13250000000ex 05	.49666666666ex 09	.266773523490ex-04
5	.18750000000ex 05	.64000000000ex 09	.292968750000ex-04
6	.75333333330ex 04	.92666666665ex 09	.812949640285ex-05
7	.14366666666ex 05	.48500000000ex 09	.296219931270ex-04
8	.10283333333ex 05	.88166666665ex 09	.116635160680ex-04
9	.16316666666ex 05	.11083333333ex 10	.147218045112ex-04
			.186078049203ex-04

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency

Table 2 (continued)

HOST MEDIATED ASSAY  
INDIVIDUAL MOUSE DATACompound No.: 71-15Organism: G-46Treatment: (-) CONTROL

## A. Acute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.49666666666ex 03	.35666666666ex 09	.139252336448ex-05
2	.14700000000ex 04	.68166666665ex 09	.215647921760ex-05
3	.29666666666ex 04	.96333333330ex 09	.307953477509ex-05
4	.12216666666ex 04	.91000000000ex 09	.134249084248ex-05
5	.56500000000ex 03	.12650000000ex 10	.446640316205ex-06
6	.17333333333ex 04	.20166666666ex 10	.859504132232ex-06
7	.16500000000ex 04	.72833333330ex 09	.226544622426ex-05
			.164895269604ex-05

## B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.17500000000ex 02	.14550000000ex 10	.120274914089ex-07
2	.12500000000ex 02	.17666666666ex 10	.707547169813ex-08
3	.11000000000ex 02	.15166666666ex 10	.725274725277ex-08
4	.10833333333ex 02	.20500000000ex 10	.528455284551ex-08
5	.17000000000ex 02	.13600000000ex 10	.12500000000ex-07
6	.33333333333ex 02	.13016666666ex 10	.256081946223ex-07
7	.10000000000ex 02	.12100000000ex 10	.826446280991ex-08
			.111447029482ex-07

Table 2 (continued)

HOST MEDIATED ASSAY  
INDIVIDUAL MOUSE DATACompound No.: 71-15Organism: G-46Treatment: MAXIMUM

## A. Acute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.255000000000ex 03	.473333333333ex 09	.538732394366ex-06
2	.833333333330ex 01	.566666666665ex 09	.147058823529ex-07
3	.833333333330ex 01	.591666666665ex 09	.140845070422ex-07
4	.211666666666ex 03	.316666666666ex 08	.668421052630ex-05
5	.114333333333ex 04	.290000000000ex 09	.394252873562ex-05
6	.583333333330ex 02	.641666666665ex 09	.909090909088ex-07
7	.133333333333ex 02	.781666666665ex 09	.170575692963ex-07
8	.321666666666ex 03	.986666666665ex 09	.326013513513ex-06
			.145353027740ex-05

## B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.141666666666ex 02	.171000000000ex 10	.828460038982ex-08
2	.27500000000ex 02	.261666666666ex 10	.105095541401ex-07
3	.101666666666ex 03	.154000000000ex 10	.660173160168ex-07
4	.666666666665ex 01	.114666666666ex 10	.581395348839ex-08
5	.583333333330ex 01	.523333333330ex 09	.111464968152ex-07
6	.10000000000ex 02	.142833333333ex 10	.700116686115ex-08
7	.20833333333ex 02	.103166666666ex 10	.201938610663ex-07
8	.191666666666ex 02	.113333333333ex 10	.169117647058ex-07
9	.30833333333ex 02	.112166666666ex 10	.274888558693ex-07
			.192630632612ex-07

Table 2 (continued)

HOST MEDIATED ASSAY  
INDIVIDUAL MOUSE DATACompound No.: 71-15Organism: G-46Treatment: INTERMEDIATE

## A. Acute

Mouse No.	Ave. No. Mutant	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
	Colonies or Recombinants/ml		
1	.40333333333ex 03	.65833333330ex 09	.612658227850ex-06
2	.15433333333ex 04	.22833333333ex 09	.675912408758ex-05
3	.16000000000ex 03	.52500000000ex 09	.304761904761ex-06
4	.33333333333ex 01	.38500000000ex 09	.855800865800ex-08
5	.39333333333ex 03	.83000000000ex 09	.473895582328ex-06
6	.65000000000ex 02	.89000000000ex 09	.730337078651ex-07
7	.29000000000ex 03	.84333333330ex 09	.343873517787ex-06
			.122514357668ex-05

## B. Subacute

Mouse No.	Ave. No. Mutant	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
	Colonies or Recombinants/ml		
1	.69166666665ex 02	.14766666666ex 10	.468397291197ex-07
2	.15833333333ex 02	.15000000000ex 10	.10555555555ex-07
3	.22500000000ex 02	.14550000000ex 10	.154639175257ex-07
4	.10000000000ex 02	.15333333333ex 10	.652173913044ex-08
5	.10833333333ex 02	.13550000000ex 10	.799507995077ex-08
6	.175000003000ex 02	.10483333333ex 10	.166931637520ex-07
7	.83333333330ex 01	.71500000000ex 09	.116550116549ex-07
8	.15000000000ex 02	.94333333330ex 09	.159010600707ex-07
9	.23333333333ex 02	.15150000000ex 10	.154015401539ex-07
10	.16666666666ex 02	.83166666665ex 09	.200400801602ex-07

.16/066877071ex-07

Table 2 (continued)

HOST MEDIATED ASSAY  
INDIVIDUAL MOUSE DATA

Compound No.: 71-15

Organism: G-46

Treatment: LOW

**A. Acute**

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.33333333333ex 01	.57333333330ex 09	.581395348840ex-08
2	.46666666666ex 02	.96666666665ex 08	.482758620689ex-06
3	.50000000000ex 01	.73666666665ex 09	.678733031675ex-08
4	.43333333333ex 02	.77500000000ex 09	.559139784945ex-07
5	.10000000000ex 02	.10466666666ex 10	.955414012744ex-08
6	.41833333333ex 03	.11000000000ex 10	.380303030302ex-06
7	.53500000000ex 03	.10733333333ex 10	.498447204970ex-06
			.205654036911ex-06

**B. Subacute**

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.17500000000ex 02	.15050000000ex 10	.116279069767ex-07
2	.15000000000ex 02	.23333333333ex 10	.642857142858ex-08
3	.50000000000ex 01	.14350000000ex 10	.348432055749ex-08
4	.91666666665ex 01	.12066666666ex 10	.759668508290ex-08
5	.50000000000ex 01	.60500000000ex 09	.826446280991ex-08
6	.11666666666ex 02	.87666666665ex 09	.133079847908ex-07
7	.10833333333ex 02	.65166666665ex 09	.166240409207ex-07
8	.41666666666ex 01	.70833333330ex 09	.588235294119ex-08
			.915204058850ex-08

Table 2 (continued)

HOST MEDIATED ASSAY  
INDIVIDUAL MOUSE DATA

Compound No.: 71-15  
 Organism: TA-1530  
 Treatment: (+) CONTROL

## A. Acute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.25166666666ex 03	.65666666665ex 09	.383248730964ex-06
2	.41833333333ex 03	.28833333333ex 09	.145086705202ex-05
3	.98166666666ex 03	.49166666666ex 09	.199661016949ex-05
4	.197500000000ex 03	.10166666666ex 09	.194262295083ex-05
5	.45833333333ex 03	.57333333330ex 09	.799418604655ex-06
6	.38666666666ex 03	.775000000000ex 09	.49824731181ex-06
7	.325000000000ex 03	.550000000000ex 08	.590909090909ex-05
8	.320000000000ex 03	.66166666666ex 09	.483627204031ex-06
<b>.168305129402ex-05</b>			

## B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency

Table 2 (continued)

HOST MEDIATED ASSAY  
INDIVIDUAL MOUSE DATACompound No.: 71-15Organism: TA-1530Treatment: (-) CONTROL

## A. Acute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.12166666666ex 03	.66000000000ex 09	.184343434342ex-06
2	.18000000000ex 03	.921666666665ex 09	.195298372513ex-06
3	.95000000000ex 02	.653333333330ex 09	.145408163266ex-06
4	.966666666665ex 02	.95000000000ex 09	.101754385964ex-06
5	.16000000000ex 04	.22166666666ex 10	.721804511280ex-06
6	.30000000000ex 02	.52000000000ex 09	.576923076923ex-07
7	.51666666665ex 02	.76833333330ex 09	.672451193059ex-07
			.210506613478ex-06

## B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.48333333333ex 02	.91500000000ex 09	.528233151183ex-07
2	.55000000000ex 02	.14716666666ex 10	.373725934316ex-07
3	.47750000000ex 03	.12133333333ex 10	.393543956045ex-06
4	.47500000000ex 02	.12883333333ex 10	.368693402329ex-07
5	.29166666666ex 02	.40833333333ex 09	.714285714284ex-07
6	.54166666665ex 02	.11950000000ex 10	.453277545326ex-07
7	.33333333333ex 02	.10983333333ex 10	.303490136571ex-07
8	.59166666665ex 02	.11816666666ex 10	.500705218619ex-07
			.897231332880ex-07

Table 2 (continued)

HOST MEDIATED ASSAY  
INDIVIDUAL MOUSE DATACompound No.: 71-15Organism: TA-1530Treatment: MAXIMUM

## A. Acute

Mouse No.	Ave. No. Mutant	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
	Colonies or Recombinants/ml		
1	.14833333333ex 03	.41333333333ex 10	.35887096774ex-07
2	.90000000000ex 03	.55000000000ex 10	.16363636363ex-06
3	.62500000000ex 03	.67333333330ex 09	.928217821786ex-06
4	.28333333333ex 02	.99166666665ex 09	.285714285714ex-07
5	.25000000000ex 02	.42333333333ex 09	.590551181102ex-07
6	.20000000000ex 02	.33500000000ex 09	.597014925373ex-07
			.212511553566ex-06

## B. Subacute

Mouse No.	Ave. No. Mutant	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
	Colonies or Recombinants/ml		
1	.37000000000ex 02	.94000000000ex 09	.393617021276ex-07
2	.26666666666ex 02	.49166666666ex 09	.542372881355ex-07
3	.48333333333ex 02	.53666666665ex 09	.900621118014ex-07
4	.49166666666ex 02	.54166666665ex 09	.907692307693ex-07
5	.31666666666ex 02	.79166666665ex 09	.40000000000ex-07
6	.55000000000ex 02	.45833333333ex 09	.12000000000ex-06
7	.28750000000ex 02	.86666666665ex 09	.331730769231ex-07
8	.36666666666ex 02	.83666666665ex 09	.438247011952ex-07
9	.38333333333ex 02	.42666666666ex 09	.89843750000ex-07
10	.62000000000ex 02	.73833333330ex 09	.839729119642ex-07
			.685244772915ex-07

Table 2 (continued)

HOST MEDIATED ASSAY  
INDIVIDUAL MOUSE DATACompound No.: 71-15Organism: TA-1530Treatment: INTERMEDIATE

## A. Acute

Mouse No.	Ave. No. Mutant	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
	Colonies or Recombinants/ml		
1	.533333333330ex 02	.811666666665ex 09	.657084188908ex-07
2	.333333333333ex 02	.328333333333ex 09	.101522842639ex-06
3	.550000000000ex 02	.471666666666ex 09	.116607773851ex-06
4	.800000000000ex 02	.181666666666ex 09	.440366972478ex-06
5	.300000000000ex 02	.171666666666ex 09	.174757281554ex-06
6	.283333333333ex 02	.208333333333ex 09	.136000000000ex-06
7	.183333333333ex 02	.345000000000ex 09	.531400956182ex-07
8	.150000000000ex 02	.115000000000ex 09	.130434782608ex-06
9	.483333333333ex 02	.175000000000ex 09	.276190476190ex-06
			.166080960534ex-06

## B. Subacute

Mouse No.	Ave. No. Mutant	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
	Colonies or Recombinants/ml		
1	.408333333333ex 02	.695000000000ex 09	.587529976018ex-07
2	.235000000000ex 03	.103666666666ex 10	.226688102895ex-06
3	.366666666666ex 02	.875000000000ex 09	.419047619046ex-07
4	.175000000000ex 03	.533333333330ex 09	.328125000002ex-06
5	.291666666666ex 02	.668333333330ex 09	.436408977557ex-07
6	.766666666665ex 02	.973333333330ex 09	.787671232877ex-07
7	.583333333330ex 02	.102500000000ex 10	.569105691053ex-07
			.119255636078ex-06

Table 2 (continued)

HOST MEDIATED ASSAY  
INDIVIDUAL MOUSE DATACompound No.: 71-15Organism: TA-1530Treatment: LOW

## A. Acute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.35000000000ex 02	.31500000000ex 09	.1111111111lex-06
2	.516666666665ex 02	.46833333333ex 09	.110320284697ex-06
3	.80000000000ex 02	.17833333333ex 09	.44859813084lex-06
4	.53333333330ex 02	.82000000000ex 09	.65040604060ex-07
5	.20000000000ex 02	.21166666666ex 09	.944881889766ex-07
6	.20000000000ex 02	.16666666666ex 09	.12000000000ex-06
7	.13333333333ex 02	.11666666666ex 09	.114285714286ex-06
8	.48333333333ex 02	.17833333333ex 09	.271028037383ex-06
9	.16666666666ex 02	.34666666666ex 09	.480769230768ex-07
10	.45000000000ex 02	.53500000000ex 09	.841121495327ex-07
			.146706119029ex-06

## B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.45000000000ex 02	.57333333330ex 09	.784883720934ex-07
2	.10750000000ex 03	.57500000000ex 09	.186956521739ex-06
3	.55000000000ex 02	.11600000000ex 10	.474137931034ex-07
4	.40750000000ex 03	.57500000000ex 09	.708695652173ex-06
5	.34166666666ex 02	.67666666665ex 09	.504926108374ex-07
6	.47500000000ex 02	.80000000000ex 09	.593750000000ex-07
7	.19166666666ex 02	.53166666665ex 09	.360501567397ex-07
8	.45833333333ex 02	.10883333333ex 10	.421133231241ex-07
9	.56250000000ex 02	.87833333330ex 09	.640417457307ex-07
			.141514130612ex-06

Table 2 (continued)

HOST MEDIATED ASSAY  
INDIVIDUAL MOUSE DATACompound No.: 71-15Organism: D-3Treatment: (+) CONTROL

## A. Acute

Mouse No.	Ave. No. Mutant	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
	Colonies or Recombinants/ml		
1	.34000000000ex 05	.54000000000ex 08	.629629629629ex-03
2	.35500000000ex 05	.388333333333ex 08	.914163090129ex-03
3	.33333333333ex 04	.112500000000ex 07	.296296296296ex-02
4	.570000000000ex 05	.785000000000ex 08	.726114649681ex-03
5	.380000000000ex 05	.428333333333ex 08	.887159533074ex-03
6	.485000000000ex 05	.571666666665ex 08	.848396501460ex-03
7	.330000000000ex 05	.305000000000ex 08	.108196721311ex-02
8	.115000000000ex 05	.751666666665ex 08	.152993348115ex-03
9	.415000000000ex 05	.208333333333ex 08	.199200000000ex-02
			.113282076978ex-02

## B. Subacute

Mouse No.	Ave. No. Mutant	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
	Colonies or Recombinants/ml		

Table 2 (continued)

HOST MEDIATED ASSAY  
INDIVIDUAL MOUSE DATACompound No.: 71-15Organism: D-3Treatment: (-) CONTROL

## A. Acute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.30000000000ex 04	.44000000000ex 08	.681818181818ex-04
2	.25000000000ex 04	.50666666665ex 08	.493421052633ex-04
3	.15000000000ex 04	.22833333333ex 08	.656934306570ex-04
4	.45000000000ex 04	.516666666665ex 08	.870567741938ex-04
5	.35000000000ex 04	.41333333333ex 08	.846774193549ex-04
6	.45000000000ex 04	.27166666666ex 08	.165644171779ex-03
7	.50000000000ex 04	.46333333333ex 08	.107913669064ex-03
8	.35000000000ex 04	.20666666666ex 08	.169354838710ex-03
9	.20000000000ex 04	.36333333333ex 08	.550458715596ex-04
10	.20000000000ex 04	.32833333333ex 08	.609137055838ex-04
			.913863804344ex-04

## B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.50000000000ex 04	.546666666665ex 08	.914634146344ex-04
2	.40000000000ex 04	.46833333333ex 08	.854092526690ex-04
3	.35000000000ex 04	.581666666665ex 08	.601719197709ex-04
4	.30000000000ex 04	.521666666665ex 08	.575079872206ex-04
5	.30000000000ex 04	.666666666665ex 08	.450000000001ex-04
6	.55000000000ex 04	.871666666665ex 08	.630975143404ex-04
7	.35000000000ex 04	.591666666665ex 08	.591549295776ex-04
8	.65000000000ex 04	.10483333333ex 09	.620031796504ex-04
9	.50000000000ex 04	.71333333330ex 08	.700934579442ex-04
10	.55000000000ex 04	.87833333330ex 08	.626185958256ex-04
			.656520251629ex-04

Table 2 (continued)

HOST MEDIATED ASSAY  
INDIVIDUAL MOUSE DATACompound No.: 71-15Organism: D-3Treatment: MAXIMUM

## A. Acute

<u>Mouse No.</u>	<u>Ave. No. Colonies or Recombinants/ml</u>	<u>Ave. No. Colony Forming Units/ml</u>	<u>Mutation or Recombination Frequency</u>
1	.250000000000ex 04	.887500000000ex 07	.281590140845ex-03
2	.350000000000ex 04	.536666666665ex 08	.652173913045ex-04
3	.350000000000ex 04	.423333333333ex 08	.826771653543ex-04
4	.300000000000ex 04	.220000000000ex 08	.136263636363ex-03
5	.450000000000ex 04	.426666666666ex 08	.105468750000ex-03
6	.150000000000ex 04	.200000000000ex 08	.750000000000ex-04
7	.100000000000ex 04	.947500000000ex 07	.105540897097ex-03
			.121708282994ex-03

## B. Subacute

<u>Mouse No.</u>	<u>Ave. No. Colonies or Recombinants/ml</u>	<u>Ave. No. Colony Forming Units/ml</u>	<u>Mutation or Recombination Frequency</u>
1	.250000000000ex 04	.340000000000ex 08	.735294117647ex-04
2	.300000000000ex 04	.390000000000ex 08	.769230769230ex-04
3	.250000000000ex 04	.525000000000ex 08	.476190476190ex-04
4	.750000000000ex 04	.661666666665ex 08	.113350125944ex-03
5	.750000000000ex 04	.376666666666ex 08	.199115044248ex-03
6	.250000000000ex 04	.493333333333ex 08	.506756756757ex-04
7	.550000000000ex 04	.610000000000ex 08	.901639344262ex-04
8	.300000000000ex 04	.493333333333ex 08	.608108108108ex-04
9	.200000000000ex 04	.533333333330ex 08	.375000000002ex-04
10	.300000000000ex 04	.280000000000ex 08	.107142857142ex-03
			.856829984551ex-04

Table 2 (continued)

HOST MEDIATED ASSAY  
INDIVIDUAL MOUSE DATA

Compound No.: 71-15Organism: D-3Treatment: INTERMEDIATE

## A. Acute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.15000000000ex 04	.29166666666ex 08	.514285714286ex-04
2	.15000000000ex 04	.44166666666ex 08	.339622641509ex-04
3	.50000000000ex 03	.12000000000ex 08	.41666666666ex-04
4	.30000000000ex 04	.60833333330ex 08	.493150684934ex-04
5	.35000000000ex 04	.53333333330ex 08	.65625000004ex-04
6	.20000000000ex 04	.76666666665ex 08	.260869565217ex-04
7	.10000000000ex 04	.10950000000ex 08	.913242009132ex-04
8	.25000000000ex 04	.44166666666ex 08	.566037735849ex-04
			.520015627196ex-04

## B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.15000000000ex 04	.59166666665ex 08	.253521126761ex-04
2	.25000000000ex 04	.30666666666ex 08	.815217391306ex-04
3	.80000000000ex 04	.32833333333ex 08	.243654822335ex-03
4	.25000000000ex 04	.37500000000ex 08	.66666666666ex-04
5	.40000000000ex 04	.15833333333ex 08	.252631578947ex-03
6	.70000000000ex 04	.52500000000ex 08	.13333333333ex-03
7	.65000000000ex 04	.72000000000ex 08	.90277777777ex-04
8	.30000000000ex 04	.51500000000ex 08	.582524271844ex-04
9	.40000000000ex 04	.31166666666ex 08	.128342245989ex-03
10	.25000000000ex 04	.28666666666ex 08	.872093023257ex-04
			.116724200635ex-03

Table 2 (concluded)

HOST MEDIATED ASSAY  
INDIVIDUAL MOUSE DATACompound No.: 71-15Organism: D-3Treatment: LOW

## A. Acute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.40000000000ex 04	.49166666666ex 08	.813559322035ex-04
2	.20000000000ex 04	.33833333333ex 08	.591133004926ex-04
3	.15000000000ex 04	.37166666666ex 08	.403587443946ex-04
4	.15000000000ex 04	.81750000000ex 07	.183486238532ex-03
5	.20000000000ex 04	.20833333333ex 08	.960000000001ex-04
6	.20000000000ex 04	.43666666666ex 08	.458015267176ex-04
7	.30000000000ex 04	.57166666665ex 08	.524781341109ex-04
8	.30000000000ex 04	.33500000000ex 08	.895522388059ex-04
9	.50000000000ex 04	.59666666666ex 08	.83798826817ex-04
			.813272219927ex-04

## B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.30000000000ex 04	.28333333333ex 08	.105882352941ex-03
2	.35000000000ex 04	.51500000000ex 08	.679611650485ex-04
3	.20000000000ex 04	.37166666666ex 08	.538116591929ex-04
4	.35000000000ex 04	.44333333333ex 08	.789473684211ex-04
5	.60000000000ex 04	.36000000000ex 08	.16666666666ex-03
6	.25000000000ex 04	.53500000000ex 08	.467289719626ex-04
7	.50000000000ex 04	.59166666665ex 08	.845070422537ex-04
8	.40000000000ex 04	.53666666665ex 08	.745341614909ex-04
9	.50000000000ex 04	.34166666666ex 08	.146341463414ex-03
			.917089834874ex-04

## ERRATUM

Table 3

HOST-MEDIATED ASSAY  
IN VITRO MUTAGENICITY OF COMPOUND 71-15 (GUM ARABIC)

Salmonella typhimurium G-46

<u>5% w/v 71-15</u>	<u>EMS</u>
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negative	positive
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Salmonella typhimurium TA-1530

<u>5% w/v 71-15</u>	<u>EMS</u>
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negative	positive
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Saccharomyces cerevisiae D-3

Compound	Concentration	Survival (%)	Recombinants/ $10^5$		RFT/RFC
			Survivors	RFT/RFC	
71-15	5% w/v	16%	2.57		1.15
EMS	1% w/v	62%	89.60		38.62
Control (-)	--	100%	2.32 ✓		1

Table

CYTOGENETIC ASSAY  
METAPHASE SUMMARY SHEET BY TIME OF SACRIFICE  
Compound 71-15

Dosage (mg/kg)	Time*	Mitotic Index (%)	No. of Animals	No. of Cells	Cells with Breaks (%)	Cells with Rearrange-ments (%)		Cells with More than One Type of Aber. (%)	Cells with Aber. (%)
						Cells with Breaks (%)	Cells with Rearrange-ments (%)		
TEU (0.4 mg/kg)	6	0.55%	4	172	14.0%	2.9%	1.2%	15.7%	
Negative Control	6	1.53	3	150	0.7	0	0	0.7	
30 mg/kg	6	1.57	5	228	0.9	0	0	0.9	
2500 mg/kg	6	1.77	5	228	4.8	0.4	0	5.3	
5000 mg/kg	6	1.74	5	191	5.2	0	0	5.2	
Negative Control	24	1.3	3	99	4.0	0	0	4.0	
30 mg/kg	24	2.02	5	250	2.4	0.4	0	2.8	
2500 mg/kg	24	1.69	5	237	2.2	0.4	0	2.5	
5000 mg/kg	24	2.31	5	250	0.4	0.4	0	0.8	
Negative Control	48	2.23	3	150	2.7	0	0	2.7	
30 mg/kg	48	2.14	5	250	1.2	0	0	1.2	
2500 mg/kg	48	1.79	5	250	2.0	0	0	2.0	
5000 mg/kg	48	2.05	5	250	1.2	0	0	1.2	
Negative Control	SA**	1.83	3	150	2.7	0	0	2.7	
30 mg/kg	SA	2.78	5	250	2.4	0.8	0	3.2	
2500 mg/kg	SA	1.95	5	250	2.4	0	0	2.4	
5000 mg/kg	SA	1.93	5	250	1.2	0.4	0	1.6	

\* Time of sacrifice after treatment (hours)

\*\* SA = subacute

Table 5

CYTogenETIC ASSAY  
METAPHASE SUMMARY SHEET BY DOSE LEVELS  
Compound 71-15

Dosage (mg/kg)	Time*	Mitotic Index (%)	No. of Animals	No. of Cells	Cells with Breaks (%)	Cells with Rearrangements (%)		Cells with More than One Type of Aberr.	Cells with Aberr.
						Cells with Breaks (%)	Cells with Rearrangements (%)		
TEM (0.4 mg/kg)	6	0.55%	4	172	14.0%	2.9%	1.2%	15.7%	
Negative Control									
24	1.53	3	150	0.7	0	0	0.7	0	
48	1.30	3	90	4.0	0	0	4.0	0	
SA	2.23	3	150	2.7	0	0	2.7	0	
SA	1.83	3	150	2.7	0	0	2.7	0	
30 mg/kg	6	1.57	5	228	0.9	0	0	0	0.9
	24	2.02	5	250	2.4	0.4	0	0	2.8
	48	2.14	5	250	1.2	0	0	0	1.2
	SA	2.78	5	250	2.4	0.8	0	0	3.2
2500 mg/kg	6	1.77	5	228	4.8	0.4	0	5.3	
	24	1.69	5	237	2.2	0.4	0	2.5	
	48	1.79	5	250	2.0	0	0	2.0	
	SA	1.95	5	250	2.4	0	0	2.4	
5000 mg/kg	6	1.74	5	191	5.2	0	0	5.2	
	24	2.31	5	250	0.4	0.4	0	0.8	
	48	2.05	5	250	1.2	0	0	1.2	
	SA	1.93	5	250	1.2	0.4	0	1.6	

\* Time of sacrifice after treatment (hours)

Table 6

CYTogenETIC ASSAY  
ANAPHASE SUMMARY SHEET  
Compound 71-15

Dosage	Time*	No. of Cells	Cells with Acentric Fragments (%)	Cells with Bridges (%)	Multipolar Cells (%)	Cells with More than One Type Abnor.	Cells with Abnor.
Negative Control	48	83	1.2.0%	6.0%	--	2.4%	15.7%
1.25 $\mu$ g/ml	48	101	9.9	15.8	1.0	5.9	20.8
12.5 $\mu$ g/ml	48	138	19.6	15.9	--	7.2	28.1
125 $\mu$ g/ml	48	101	14.9	15.8	--	8.9	21.8

No anaphases at either concentration

positive Control  
(TEN & 0.5  $\mu$ g/ml  
and 0.1  $\mu$ g/ml)

\* Time of harvest after treatment

Table 8

## AVERAGE IMPLANTATIONS PER PREGNANT FEMALE

## Summary

Compound: Gum Arabic  
FDA No: 71-15

Week of Study	Control (10 ml/kg)	TEM (0.2 mg/kg)	71-15 (30 mg/kg)	71-15 (2.5 g/kg)	71-15 (5 g/kg)
<u>Acute-Single Dose</u>					
1	90/9=10.0	86/11= 7.8	217/18=12.1	123/11=11.2	208/18=11.6
2	176/20= 8.8	193/20= 9.7	168/15=11.2	226/19=11.9**I	233/20=11.7*I
3	199/18=11.1	166/17= 9.8	177/15=11.8	205/18=11.4	232/19=12.2
4	194/19=10.2	94/14= 6.7*	212/18=11.8	195/17=11.5	201/18=11.2
5	163/16=10.2	199/17=11.7	241/20=12.1*I	207/18=11.5	205/19=10.8
6	151/12=12.6	238/20=11.9	251/20=12.6	193/17=11.4	202/20=10.1
7	176/17=10.4	197/18=10.9	208/19=10.9	199/19=10.5	188/15=12.5*I
8	240/20=12.0	248/20=12.4	262/20=13.1	255/20=12.8	241/19=12.7
<u>Subacute-Multiple Dose</u>					
1	134/11=12.2		234/20=11.7	166/14=11.9	198/16=12.4
2	184/16=11.5		223/20=11.2	238/20=11.9	169/15=11.3
3	171/15=11.4		245/20=12.3	218/19=11.5	212/19=11.2
4	199/18=11.1		214/18=11.9	225/19=11.8	179/16=11.2
5	165/14=11.8		209/18=11.6	226/20=11.3	195/18=10.8
6	203/17=11.9		228/19=12.0	198/18=11.0	189/15=12.6
7	224/19=11.8		225/19=11.8	240/20=12.0	256/20=12.8

\* Significant at  $P < 0.05$

\*\* Significant at  $P < 0.01$

I Increase above control

## DOMINANT LETHAL GENE-RAT

Table 9

## AVERAGE DEAD IMPLANTS PER PREGNANT FEMALE

## Summary

Compound: Gum Arabic  
FDA No: 71-15

Week of Study	Control (10 ml/kg)	TEM (0.2 mg/kg)	71-15 (30 mg/kg)	71-15 (2.5 g/kg)	71-15 (5 g/kg)
<u>Acute-Single Dose</u>					
1	5/9=0.56	31/11=2.82*	23/18=1.27	6/11=0.55	16/18=0.89
2	9/20=0.45	125/20=6.25**	13/15=0.87	9/19=0.47	18/20=0.90
3	8/18=0.44	109/17=6.41**	27/15=1.80*	22/18=1.22	32/19=1.68*
4	15/19=0.79	50/14=3.57**	14/18=0.78	21/17=1.24	29/18=1.61
5	9/16=0.56	62/17=3.65**	14/20=0.70	14/18=0.78	15/19=0.79
6	11/12=0.92	14/20=0.70	25/20=1.25	12/17=0.71	13/20=0.65
7	11/17=0.65	9/18=0.50	13/19=0.68	19/19=1.00	16/15=1.07
8	14/20=0.70	9/20=0.45	26/20=1.30	9/20=0.45	12/19=0.63
<u>Subacute-Multiple Dose</u>					
1	10/11=0.91		19/20=0.95	13/14=0.93	7/16=0.44
2	10/16=0.63		14/20=0.70	24/20=1.20	10/15=0.67
3	17/15=1.13		18/20=0.90	19/19=1.00	21/19=1.11
4	16/18=0.89		13/18=0.72	21/19=1.11	10/16=0.63
5	9/14=0.64		15/18=0.83	17/20=0.85	13/18=0.72
6	26/17=1.53		14/19=0.74	14/18=0.78	19/15=1.27
7	11/19=0.58		8/19=0.42	16/20=0.80	17/20=0.85

\* Significant at  $P < 0.05$

\*\* Significant at  $P < 0.01$

DOMINANT LETHAL GENE-RAT

Table 10

## DEAD IMPLANTS/TOTAL IMPLANTS

## Summary

Compound: Gum Arabic  
 FDA No: 71-15

Week of Study	Control (10 ml/kg)	TEM (0.2 mg/kg)	71-15 (30 mg/kg)	71-15 (2.5 g/kg)	71-15 (5 g/kg)
<u>Acute-Single Dose</u>					
1	5/90=0.06	31/86=0.36**	23/217=0.11	6/123=0.05	16/208=0.08
2	9/176=0.05	125/193=0.65**	13/168=0.08	9/226=0.04	18/233=0.08
3	8/199=0.04	109/166=0.66**	27/177=0.15	22/205=0.11	32/232=0.14*
4	15/194=0.08	50/94=0.53**	14/212=0.07	21/195=0.11	29/201=0.14
5	9/163=0.06	62/199=0.31*	14/241=0.06	14/207=0.07	15/205=0.07
6	11/151=0.07	14/238=0.06	25/251=0.10	12/193=0.06	13/202=0.06
7	11/176=0.06	9/197=0.05	13/208=0.06	19/199=0.10	16/188=0.09
8	14/240=0.06	9/248=0.04	26/262=0.10	9/255=0.04	12/241=0.05
<u>Subacute-Multiple Dose</u>					
1	10/134=0.07		19/234=0.08	13/166=0.08	7/198=0.04
2	10/184=0.05		14/223=0.06	24/238=0.10	10/169=0.06
3	17/171=0.10		18/245=0.07	19/218=0.09	21/212=0.10
4	16/199=0.08		13/214=0.06	21/225=0.09	10/179=0.06
5	9/165=0.05		15/209=0.07	17/226=0.08	13/195=0.07
6	26/203=0.13		14/228=0.06	14/198=0.07	19/189=0.10
7	11/224=0.05		8/225=0.04	16/240=0.07	17/256=0.07

\* Significant at  $P < 0.05$ \*\* Significant at  $P < 0.01$

DOMINANT LETHAL GENE-RAT

Table 11

AVERAGE CORPORA LUTEA PER PREGNANT FEMALE

Summary

Compound: Gum Arabic  
FDA No: 71-15

Week of Study	Control (10 ml/kg)	TEM (0.2 mg/kg)	71-15 (30 mg/kg)	71-15 (2.5 g/kg)	71-15 (5 g/kg)
<u>Acute-Single Dose</u>					
1	123/9=13.7	138/11=12.5	238/18=13.2	146/11=13.3	280/18=15.6
2	228/20=11.4	247/20=12.4	191/15=12.7	247/19=13.0**†	256/20=12.8*†
3	216/18=12.0	196/17=11.5	184/15=12.3	235/18=13.1	244/19=12.8
4	244/19=12.8	161/14=11.5*	231/18=12.8	235/17=13.8	229/18=12.7
5	198/16=12.4	228/17=13.4	266/20=13.3	227/18=12.6	240/19=12.6
6	163/12=13.6	249/20=12.5	262/20=13.1	206/17=12.1	229/20=11.5*
7	213/17=12.5	234/18=13.0	243/19=12.8	235/19=12.4	202/15=13.5
8	271/20=13.6	264/20=13.2	279/20=14.0	275/20=13.8	262/19=13.8
<u>Subacute-Multiple Dose</u>					
1	141/11=12.8		264/20=13.2	179/14=12.8	217/16=13.6
2	190/16=11.9		238/20=11.9	244/20=12.2	185/15=12.3
3	189/15=12.6		270/20=13.5	251/19=13.2	244/19=12.8
4	217/18=12.1		235/18=13.1	241/19=12.7	194/16=12.1
5	183/14=13.1		230/18=12.8	245/20=12.3	212/18=11.8
6	245/17=14.4		251/19=13.2	222/18=12.3*	196/15=13.1
7	251/19=13.2		241/19=12.7	283/20=14.2	281/20=14.1

\* Significant at  $P < 0.05$

\*\* Significant at  $P < 0.01$

† Increase above control

## DOMINANT LETHAL GENE-RAT

Table 12

AVERAGE PREIMPLANTATION LOSS PER PREGNANT FEMALE

## Summary

Compound: Gum Arabic  
 FDA No: 71-15

Week of Study	Control (10 ml/kg)	TEM (0.2 mg/kg)	71-15 (30 mg/kg)	71-15 (2.5 g/kg)	71-15 (5 g/kg)
<u>Acute-Single Dose</u>					
1	33/9=3.67	52/11=4.73	21/18=1.17	23/11=2.09	72/18=4.00
2	52/20=2.60	54/20=2.70	23/15=1.53	21/19=1.10*D	23/20=1.15*D
3	17/18=0.94	30/17=1.76	7/15=0.47	30/18=1.67	12/19=0.63
4	50/19=2.63	67/14=4.79 *	19/18=1.06	40/17=2.35	28/18=1.56
5	35/16=2.19	29/17=1.71	25/20=1.25	20/18=1.11	35/19=1.84
6	12/12=1.00	11/20=0.55	11/20=0.55	13/17=0.76	27/20=1.35
7	37/17=2.18	37/18=2.06	35/19=1.84	36/19=1.89	14/15=0.93
8	31/20=1.55	16/20=0.80	17/20=0.85	20/20=1.00	21/19=1.11
<u>Subacute-Multiple Dose</u>					
1	7/11=0.64		30/20=1.50	13/14=0.93	19/16=1.19
2	6/16=0.38		15/20=0.75	6/20=0.30	16/15=1.07
3	18/15=1.20		25/20=1.25	33/19=1.74	32/19=1.68
4	18/18=1.00		21/18=1.17	16/19=0.84	15/16=0.94
5	18/14=1.29		21/18=1.17	19/20=0.95	17/18=0.94
6	42/17=2.47		23/19=1.21	24/18=1.33	7/15=0.47
7	27/19=1.42		16/19=0.84	43/20=2.15	25/20=1.25

\* Significant at P &lt; 0.01

D Decrease below control

DOMINANT LETHAL GENE-RAT

Table 7

ORAL LD<sub>50</sub>

Compound: Gum Arabic  
FDA NO: 71-15

Single Dose <sup>a</sup>	> 10 g/kg
Multiple Dose <sup>b</sup>	~ 5 g/kg

<sup>a</sup> Five male, Sprague-Dawley rats, weighing 200-250 g each, were fasted overnight and then administered orally specified amounts of the candidate compound suspended in water.

<sup>b</sup> Five male, nonfasted Sprague-Dawley rats, weighing 200-250g each, were administered orally specified amounts of the candidate compound as a partial suspension in water.

DOMINANT LETHAL GENE-RAT

Table 8

AVERAGE IMPLANTATIONS PER PREGNANT FEMALE

Summary

Compound: Gum Arabic  
FDA No: 71-15

Week of Study	Control (10 ml/kg)	TEM (0.2 mg/kg)	71-15 (30 mg/kg)	71-15 (2.5 g/kg)	71-15 (5 g/kg)
<u>Acute-Single Dose</u>					
1	90/9=10.0	86/11=7.8	217/18=12.1	123/11=11.2	208/18=11.6
2	176/20=8.8	193/20=9.7	168/15=11.2	226/19=11.9**I	233/20=11.7*I
3	199/18=11.1	166/17=9.8	177/15=11.8	205/18=11.4	232/19=12.2
4	194/19=10.2	94/14=6.7*	212/18=11.8	195/17=11.5	201/18=11.2
5	163/16=10.2	199/17=11.7	241/20=12.1	207/18=11.5	205/19=10.8
6	151/12=12.6	238/20=11.9	251/20=12.6	193/17=11.4	202/20=10.1
7	176/17=10.4	197/18=10.9	208/19=10.9	199/19=10.5	188/15=12.5
8	240/20=12.0	248/20=12.4	262/20=13.1	255/20=12.8	241/19=12.7
<u>Subacute-Multiple Dose</u>					
1	134/11=12.2		234/20=11.7	166/14=11.9	198/16=12.4
2	184/16=11.5		223/20=11.2	238/20=11.9	169/15=11.3
3	171/15=11.4		245/20=12.3	218/19=11.5	212/19=11.2
4	199/18=11.1		214/18=11.9	225/19=11.8	179/16=11.2
5	165/14=11.8		209/18=11.6	226/20=11.3	195/18=10.8
6	203/17=11.9		228/19=12.0	198/18=11.0	189/15=12.6
7	224/19=11.8		225/19=11.8	249/20=12.0	256/20=12.8

\* Significant at P < 0.05

\*\* Significant at P < 0.01

I Increase above control

DOMINANT LETHAL GENE-RAT

Table 9

AVERAGE DEAD IMPLANTS PER PREGNANT FEMALE

Summary

Compound: Gum Arabic  
FDA No: 71-15

Week of Study	Control (10 ml/kg)	TEM (0.2 mg/kg)	71-15 (30 mg/kg)	71-15 (2.5 g/kg)	71-15 (5 g/kg)
<u>Acute-Single Dose</u>					
1	5/9=0.56	31/11=2.82	23/18=1.27	6/11=0.55	16/18=0.89
2	9/20=0.45	125/20=6.25**	13/15=0.87	9/19=0.47	18/20=0.90
3	8/18=0.44	109/17=6.41**	27/15=1.80	22/18=1.22	32/19=1.68*
4	15/19=0.79	50/14=3.57**	14/18=0.78	21/17=1.24	29/18=1.61
5	9/16=0.56	62/17=3.65**	14/20=0.70	14/18=0.78	15/19=0.79
6	11/12=0.92	14/20=0.70	25/20=1.25	12/17=0.71	13/20=0.65
7	11/17=0.65	9/18=0.50	13/19=0.68	19/19=1.00	16/15=1.07
8	14/20=0.70	9/20=0.45	26/20=1.30	9/20=0.45	12/19=0.63
<u>Subacute-Multiple Dose</u>					
1	10/11=0.91		19/20=0.95	13/14=0.93	7/16=0.44
2	10/16=0.63		14/20=0.70	24/20=1.20	10/15=0.67
3	17/15=1.13		18/20=0.90	19/19=1.00	21/19=1.11
4	16/18=0.89		13/18=0.72	21/19=1.11	10/16=0.63
5	9/14=0.64		15/18=0.83	17/20=0.85	13/18=0.72
6	26/17=1.53		14/19=0.74	14/18=0.78	19/15=1.27
7	11/19=0.58		8/19=0.42	16/20=0.80	17/20=0.85

\* Significant at  $P < 0.05$

\*\* Significant at  $P < 0.01$

DOMINANT LETHAL GEN• RAT

Table 10

DEAD IMPLANTS/TOTAL IMPLANTS

Summary

Compound: Gum Arabic  
FDA No: 71-15

Week of Study	Control (10 ml/kg)	TEM (0.2 mg/kg)	71-15 (30 mg/kg)	71-15 (2.5 g/kg)	71-15 (5 g/kg)
<u>Acute-Single Dose</u>					
1	5/90=0.06	31/86=0.36**	23/217=0.11	6/123=0.05	16/208=0.08
2	9/176=0.05	125/193=0.65**	13/168=0.08	9/226=0.04	18/233=0.08
3	8/199=0.04	109/166=0.66**	27/177=0.15*	22/205=0.11	32/232=0.14*
4	15/194=0.08	50/94=0.53**	14/212=0.07	21/195=0.11	29/201=0.14
5	9/163=0.06	62/199=0.31*	14/241=0.06	14/207=0.07	15/205=0.07
6	11/151=0.07	14/238=0.06	25/251=0.10	12/193=0.06	13/202=0.06
7	11/176=0.06	9/197=0.05	13/208=0.06	19/199=0.10	16/188=0.09
8	14/240=0.06	9/248=0.04	26/262=0.10	9/255=0.04	12/241=0.05
<u>Subacute-Multiple Dose</u>					
1	10/134=0.07		19/234=0.08	13/166=0.08	7/198=0.04
2	10/184=0.05		14/223=0.06	24/238=0.10	10/169=0.06
3	17/171=0.10		18/245=0.07	19/218=0.09	21/212=0.10
4	16/199=0.08		13/214=0.06	21/225=0.09	10/179=0.06
5	9/165=0.05		15/209=0.07	17/226=0.08	13/195=0.07
6	26/203=0.13		14/228=0.06	14/198=0.07	19/189=0.10
7	11/224=0.05		8/225=0.04	16/240=0.07	17/256=0.07

\* Significant at P < 0.05

\*\* Significant at P < 0.01

Table 11

## AVERAGE CORPORA LUTEA PER PREGNANT FEMALE

## Summary

Compound: Gum Arabic  
 FDA No: 71-15

Week of Study	Control (10 ml/kg)	TEM (0.2 mg/kg)	71-15 (30 mg/kg)	71-15 (2.5 g/kg)	71-15 (5 g/kg)
<u>Acute-Single Dose</u>					
1	123/9=13.7	138/11=12.5	238/18=13.2	146/11=13.3	280/18=15.6
2	228/20=11.4	247/20=12.4	191/15=12.7	247/19=13.0*I	256/20=12.8*I
3	216/18=12.0	196/17=11.5	184/15=12.3	235/18=13.1	244/19=12.8
4	244/19=12.8	161/14=11.5*	231/18=12.8	235/17=13.8	229/18=12.7
5	198/16=12.4	228/17=13.4	266/20=13.3	227/18=12.6	240/19=12.6
6	163/12=13.6	249/20=12.5	262/20=13.1	206/17=12.1	229/20=11.5*
7	213/17=12.5	234/18=13.0	243/19=12.8	235/19=12.4	202/15=13.5
8	271/20=13.0	264/20=13.2	279/20=14.0	275/20=13.8	262/19=13.8
<u>Subacute-Multiple Dose</u>					
1	141/11=12.8		264/20=13.2	179/14=12.8	217/16=13.6
2	190/16=11.9		238/20=11.9	244/20=12.2	185/15=12.3
3	189/15=12.6		270/20=13.5	251/19=13.2	244/19=12.8
4	217/18=12.1		235/18=13.1	241/19=12.7	194/16=12.1
5	183/14=13.1		230/18=12.8	245/20=12.3	212/18=11.8
6	245/17=14.4		251/19=13.2	222/18=12.3*	196/15=13.1
7	251/19=13.2		241/19=12.7	283/20=14.2	281/20=14.1

\* Significant at  $P < 0.05$

\*\* Significant at  $P < 0.01$

I Increase above control

## DOMINANT LETHAL GENE-RAT

Table 12

## AVERAGE PREIMPLANTATION LOSS PER PREGNANT FEMALE

## Summary

Compound: Gum Arabic  
FDA No: 71-15

Week of Study	Control (10 ml/kg)	TEM (0.2 mg/kg)	71-15 (30 mg/kg)	71-15 (2.5 g/kg)	71-15 (5 g/kg)
<u>Acute Single Dose</u>					
1	33/9=3.67	52/11=4.73	21/18=1.17	23/11=2.09	72/18=4.00
2	52/20=2.60	54/20=2.70	23/15=1.53	21/19=1.10**D	23/20=1.15**D
3	17/18=0.94	30/17=1.76	7/15=0.47	30/18=1.67	12/19=0.63
4	50/19=2.63	67/14=4.79	19/18=1.06	40/17=2.35	28/18=1.56
5	35/16=2.19	29/17=1.71	25/20=1.25	20/18=1.11	35/19=1.84
6	12/12=1.00	11/20=0.55	11/20=0.55	13/17=0.76	27/20=1.35
7	37/17=2.18	37/18=2.06	35/19=1.84	36/19=1.89	14/15=0.93
8	31/20=1.55	16/20=0.80	17/20=0.85	20/20=1.00	21/19=1.11
<u>Subacute-Multiple Dose</u>					
1	7/11=0.64		30/20=1.50	13/14=0.93	19/16=1.19
2	6/16=0.38		15/20=0.75	6/20=0.30	16/15=1.07
3	18/15=1.20		25/20=1.25	33/19=1.74	32/19=1.68
4	18/18=1.00		21/18=1.17	16/19=0.84	15/16=0.94
5	18/14=1.29		21/18=1.17	19/20=0.95	17/18=0.94
6	42/17=2.47		23/19=1.21	24/18=1.33	7/15=0.47
7	27/19=1.42		16/19=0.84	43/20=2.15	25/20=1.25

\*\* Significant at  $P = 0.01$ 

D = Decrease below control

**Raw Data and Statistical Analyses**

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DOMINANT LETHAL GENE STUDY OF COMPOUND 71-15

GUM ARABIC PAGE 1

GUM ARABIC

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TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS	L	R	COMPOA LUTEA		L	R
										LATE DEATHS	DEATHS		
CNTRL15	1	S	0.0500	1	1	Y	-	7	6	0	0	7	9
CNTRL15	1	S	0.0700	1	2	Y	-	6	5	0	0	6	5
CNTRL15	1	S	0.0600	2	3	Y	-	7	6	0	0	7	3
CNTRL15	1	S	0.0900	2	4	Y	-	0	0	0	0	0	0
CNTRL15	1	S	0.0400	3	5	Y	-	0	0	0	0	0	0
CNTRL15	1	S	0.0500	3	6	Y	-	0	0	0	0	0	0
CNTRL15	1	S	0.0700	4	7	Y	-	0	0	0	0	0	0
CNTRL15	1	S	0.0600	4	8	Y	-	0	0	0	0	0	0
CNTRL15	1	S	0.0900	5	9	Y	-	0	0	0	0	0	0
CNTRL15	1	S	0.0400	5	10	Y	-	0	0	0	0	0	0
CNTRL15	1	S	0.0500	6	11	Y	-	0	0	0	0	0	0
CNTRL15	1	S	0.0700	6	12	Y	-	0	0	0	0	0	0
CNTRL15	1	S	0.0600	7	13	Y	-	0	0	0	0	0	0
CNTRL15	1	S	0.0200C	7	14	Y	-	0	0	0	0	0	0
CNTRL15	1	S	0.0400	8	15	Y	-	0	0	0	0	0	0
CNTRL15	1	S	0.0600	8	16	Y	-	0	0	0	0	0	0
CNTRL15	1	S	0.0500	9	17	Y	-	0	0	0	0	0	0
CNTRL15	1	S	0.0900	9	18	Y	-	0	0	0	0	0	0
CNTRL15	1	S	0.0400	10	19	Y	-	0	0	0	0	0	0
CNTRL15	1	S	0.0600	10	20	Y	-	0	0	0	0	0	0
CNTRL15	1	S	0.0300	51	101	Y	-	0	0	0	0	0	0
CNTRL15	1	S	0.0300	51	102	Y	-	0	0	0	0	0	0
CNTRL15	1	S	0.0300	52	103	Y	-	0	0	0	0	0	0
CNTRL15	1	S	0.0300	52	104	Y	-	0	0	0	0	0	0
CNTRL15	1	S	0.0300	53	105	Y	-	0	0	0	0	0	0
CNTRL15	1	S	0.0300	53	106	Y	-	0	0	0	0	0	0
CNTRL15	1	S	0.0300	54	107	Y	-	0	0	0	0	0	0
CNTRL15	1	S	0.0300	54	108	Y	-	0	0	0	0	0	0
CNTRL15	1	S	0.0300	54	109	Y	-	0	0	0	0	0	0
CNTRL15	1	S	0.0300	55	110	Y	-	0	0	0	0	0	0
CNTRL15	1	S	0.0300	56	111	Y	-	0	0	0	0	0	0
CNTRL15	1	S	0.0300	56	112	Y	-	0	0	0	0	0	0
CNTRL15	1	S	0.0300	56	113	Y	-	0	0	0	0	0	0
CNTRL15	1	S	0.0300	57	114	Y	-	0	0	0	0	0	0
CNTRL15	1	S	0.0300	57	115	Y	-	0	0	0	0	0	0
CNTRL15	1	S	0.0300	58	116	Y	-	0	0	0	0	0	0
CNTRL15	1	S	0.0300	58	117	Y	-	0	0	0	0	0	0
CNTRL15	1	S	0.0300	59	118	Y	-	0	0	0	0	0	0
CNTRL15	1	S	0.0300	60	119	Y	-	0	0	0	0	0	0
CNTRL15	1	S	0.0300	60	120	Y	-	0	0	0	0	0	0
71-15	1	S	0.3000	51	101	Y	-	0	0	0	0	0	0
71-15	1	S	0.3000	51	102	Y	-	0	0	0	0	0	0
71-15	1	S	0.3000	52	103	Y	-	0	0	0	0	0	0
71-15	1	S	0.3000	52	104	Y	-	0	0	0	0	0	0
71-15	1	S	0.3000	53	105	Y	-	0	0	0	0	0	0
71-15	1	S	0.3000	53	106	Y	-	0	0	0	0	0	0
71-15	1	S	0.3000	54	107	Y	-	0	0	0	0	0	0
71-15	1	S	0.3000	54	108	Y	-	0	0	0	0	0	0
71-15	1	S	0.3000	54	109	Y	-	0	0	0	0	0	0
71-15	1	S	0.3000	55	110	Y	-	0	0	0	0	0	0
71-15	1	S	0.3000	56	111	Y	-	0	0	0	0	0	0
71-15	1	S	0.3000	56	112	Y	-	0	0	0	0	0	0
71-15	1	S	0.3000	57	113	Y	-	0	0	0	0	0	0
71-15	1	S	0.3000	57	114	Y	-	0	0	0	0	0	0
71-15	1	S	0.3000	58	115	Y	-	0	0	0	0	0	0
71-15	1	S	0.3000	58	116	Y	-	0	0	0	0	0	0
71-15	1	S	0.3000	59	117	Y	-	0	0	0	0	0	0
71-15	1	S	0.3000	59	118	Y	-	0	0	0	0	0	0
71-15	1	S	0.3000	60	119	Y	-	0	0	0	0	0	0
71-15	1	S	0.3000	60	120	Y	-	0	0	0	0	0	0

DOMINANT LETHAL GENETIC STABILITY OF COMPOUND 71-15

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## DOMINANT LETHAL GENE STUDY OF COMPOUND 71-15

GUM ARABIC

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TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PRFG.	IMPLANTS			EARLY DEATHS			LATE DEATHS			CORPORA LUTEA		
							L	R	Q	L	R	Q	L	R	Q	L	R	Q
TFM15	1	S	•0n02	11	21		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
TEM15	1	S	•0n02	11	22		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
TFM15	1	S	•0n02	12	23		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
TEM15	1	S	•0n02	12	24		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
TFM15	1	S	•0n02	13	25		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
TEM15	1	S	•0n02	13	26		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
TFM15	1	S	•0n02	14	27		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
TEM15	1	S	•0n02	14	28		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
TFM15	1	S	•0n02	15	29		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
TEM15	1	S	•0n02	15	30		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
TFM15	1	S	•0n02	16	31		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
TEM15	1	S	•0n02	16	32		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
TFM15	1	S	•0n02	17	33		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
TEM15	1	S	•0n02	17	34		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
TFM15	1	S	•0n02	18	35		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
TEM15	1	S	•0n02	18	36		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
TFM15	1	S	•0n02	19	37		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
TEM15	1	S	•0n02	19	38		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
TFM15	1	S	•0n02	20	39		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
TEM15	1	S	•0n02	20	40		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTL15	1	M	0.0n00	1	1		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTL15	1	M	0.0n00	1	2		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTL15	1	M	0.0n00	2	3		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTL15	1	M	0.0n00	3	4		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTL15	1	M	0.0n00	3	5		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTL15	1	M	0.0n00	4	6		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTL15	1	M	0.0n00	4	7		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTL15	1	M	0.0n00	5	8		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTL15	1	M	0.0n00	5	9		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTL15	1	M	0.0n00	5	10		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTL15	1	M	0.0n00	6	11		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTL15	1	M	0.0n00	6	12		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTL15	1	M	0.0n00	7	13		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTL15	1	M	0.0n00	7	14		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTL15	1	M	0.0n00	8	15		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTL15	1	M	0.0n00	9	16		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTL15	1	M	0.0n00	9	17		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTL15	1	M	0.0n00	9	18		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTL15	1	M	0.0n00	10	19		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTL15	1	M	0.0n00	10	20		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0

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## DOMINANT LETHAL GENE STUDY OF COMPUTING 71-15

PAGE 4

TEST MATERIAL	WEEK	S/4	DOSE	VALVE NO.	FEMALE NO.	PREG.	IMPLANTS	DEATHS	LATE DEATHS	GUM ARAHIC		
										L	H	L
71-15	1	M	•0300	51	101	Y	1	0	0	6	6	6
71-15	1	M	•0300	51	102	Y	0	0	0	9	7	5
71-15	1	M	•0300	52	103	Y	7	5	0	4	1	2
71-15	1	M	•0300	52	104	Y	12	3	0	1	0	3
71-15	1	M	•0300	53	105	Y	5	5	0	1	0	7
71-15	1	M	•0300	53	106	Y	5	6	0	0	0	6
71-15	1	M	•0300	54	107	Y	2	4	0	0	0	8
71-15	1	M	•0300	54	108	Y	9	3	1	0	0	3
71-15	1	M	•0300	55	109	Y	2	7	0	0	0	3
71-15	1	M	•0300	55	110	Y	3	8	0	0	0	3
71-15	1	M	•0300	55	110	Y	5	6	0	0	0	6
71-15	1	M	•0300	56	111	Y	3	12	0	0	0	8
71-15	1	M	•0300	56	112	Y	7	0	0	6	6	7
71-15	1	M	•0300	57	113	Y	3	0	0	0	0	3
71-15	1	M	•0300	57	114	Y	4	0	0	0	0	5
71-15	1	M	•0300	58	115	Y	5	6	0	0	0	5
71-15	1	M	•0300	58	116	Y	3	9	0	0	0	9
71-15	1	M	•0300	59	117	Y	6	4	0	1	0	5
71-15	1	M	•0300	59	118	Y	6	5	0	0	0	5
71-15	1	M	•0300	60	119	Y	6	6	0	1	1	6
71-15	1	M	•0300	60	120	Y	5	5	0	0	0	5
71-15	1	M	2.5000	61	121	Y	3	10	0	0	0	11
71-15	1	M	2.5000	61	122	Y	7	6	0	0	0	6
71-15	1	M	2.5000	62	123	Y	0	0	0	0	0	0
71-15	1	M	2.5000	62	124	Y	5	5	0	0	0	5
71-15	1	M	2.5000	63	125	Y	4	6	0	1	0	4
71-15	1	M	2.5000	63	126	Y	5	7	0	2	2	5
71-15	1	M	2.5000	64	127	Y	0	0	0	0	0	0
71-15	1	M	2.5000	64	128	Y	0	0	0	0	0	0
71-15	1	M	2.5000	65	129	Y	5	7	0	0	0	7
71-15	1	M	2.5000	65	130	Y	0	0	0	0	0	0
71-15	1	M	2.5000	66	131	Y	0	0	0	0	0	0
71-15	1	M	2.5000	66	132	Y	5	7	0	0	0	7
71-15	1	M	2.5000	67	133	Y	7	7	0	0	0	7
71-15	1	M	2.5000	67	134	Y	4	0	0	0	0	5
71-15	1	M	2.5000	68	135	Y	0	0	0	0	0	0
71-15	1	M	2.5000	68	136	Y	-3	10	0	1	0	10
71-15	1	M	2.5000	69	137	Y	5	5	0	0	0	7
71-15	1	M	2.5000	69	138	Y	5	6	0	1	0	6
71-15	1	M	2.5000	70	139	Y	2	11	0	0	0	2

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## DOMINANT LETHAL GENE STUDY OF COMPOUND 71-15

## GUM ARABIC

PAGE 5

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS			EARLY DEATHS			LATE DEATHS			CORPORA LUTEA		
							L	R	L	R	L	R	L	R	L	R	L	R
71-15	1	M	5.0600	71	141	Y	7	6	0	0	0	0	7	6	6	9		
71-15	1	M	5.0600	71	142	Y	-4	-0	-0	-0	1	4	-0	-0	-0	-0		
71-15	1	M	5.0600	72	143	Y	-0	-0	-0	-0	0	0	0	0	0	0	0	0
71-15	1	M	5.0600	72	144	Y	-7	-8	-0	-0	0	0	0	0	0	0	0	0
71-15	1	M	5.0600	73	145	Y	6	6	1	0	0	0	0	0	0	0	0	0
71-15	1	M	5.0600	73	146	Y	1	11	0	0	0	0	0	0	0	0	0	0
71-15	1	M	5.0600	74	147	Y	9	8	0	0	0	0	0	0	0	0	0	0
71-15	1	M	5.0600	74	148	Y	-0	-0	-0	-0	0	0	0	0	0	0	0	0
71-15	1	M	5.0600	75	149	Y	-7	-5	-0	-0	0	0	0	0	0	0	0	0
71-15	1	M	5.0600	75	150	Y	8	5	0	0	0	0	0	0	0	0	0	0
71-15	1	M	5.0600	76	151	Y	7	5	0	0	0	0	0	0	0	0	0	0
71-15	1	M	5.0600	76	152	Y	-0	-0	-0	-0	0	0	0	0	0	0	0	0
71-15	1	M	5.0600	77	153	Y	-8	-3	-0	-0	0	0	0	0	0	0	0	0
71-15	1	M	5.0700	77	154	Y	11	2	0	0	0	0	0	0	0	0	0	0
71-15	1	M	5.0700	78	155	Y	6	5	0	0	0	0	0	0	0	0	0	0
71-15	1	M	5.0700	78	156	Y	5	7	0	0	0	0	0	0	0	0	0	0
71-15	1	M	5.0700	79	157	Y	2	5	0	0	0	0	0	0	0	0	0	0
71-15	1	M	5.0700	79	158	Y	5	2	0	0	0	0	0	0	0	0	0	0
71-15	1	M	5.0700	80	159	Y	0	8	0	0	0	0	0	0	0	0	0	0
71-15	1	M	5.0700	80	160	Y	-0	-0	-0	-0	0	0	0	0	0	0	0	0

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DOMINANT LETHAL GENE STUDY OF COMPOUND 71-15

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## DOMINANT LETHAL GENE STUDY OF COMPOUND 71-15

PAGE 7

TEST MATERIAL	WEEK	S/M	DOSE	FEMALE		PREG.	EARLY DEATHS			LATE DEATHS			CORPORA LUTEA			GUM ARAHIC		
				NO.	NO.		L	R	L	R	L	R	L	R	L	R	L	R
71-15	2	S	2.5n00	61	121	Y	7	4	7	4	7	4	7	4	7	4	7	4
71-15	2	S	2.5n00	61	122	Y	3	8	0	0	0	0	0	0	3	8	7	7
71-15	2	S	2.5n00	62	123	Y	5	6	0	0	0	0	0	0	9	5	5	5
71-15	2	S	2.5n00	62	124	Y	5	5	0	0	0	0	0	0	7	5	7	7
71-15	2	S	2.5n00	63	125	Y	7	7	0	0	0	0	0	0	7	5	7	7
71-15	2	S	2.5n00	63	126	Y	4	4	0	0	0	0	0	0	4	5	4	5
71-15	2	S	2.5n00	64	127	Y	0	0	0	0	0	0	0	0	0	0	0	0
71-15	2	S	2.5n00	64	128	Y	0	0	0	0	0	0	0	0	0	0	0	0
71-15	2	S	2.5n00	65	129	Y	7	5	0	0	0	0	0	0	7	5	7	5
71-15	2	S	2.5n00	65	130	Y	0	0	0	0	0	0	0	0	5	5	5	5
71-15	2	S	2.5n00	66	131	N	7	7	0	0	0	0	0	0	-2	-2	-2	-2
71-15	2	S	2.5n00	66	132	N	0	0	0	0	0	0	0	0	0	0	0	0
71-15	2	S	2.5n00	67	133	Y	3	8	0	0	0	0	0	0	3	8	3	8
71-15	2	S	2.5n00	67	134	Y	0	0	0	0	0	0	0	0	0	0	0	0
71-15	2	S	2.5n00	68	135	Y	6	6	0	0	0	0	0	0	10	6	10	6
71-15	2	S	2.5n00	68	136	Y	5	5	0	0	0	0	0	0	4	5	4	5
71-15	2	S	2.5n00	69	137	Y	10	4	0	0	0	0	0	0	4	10	4	10
71-15	2	S	2.5n00	69	138	Y	3	8	0	0	0	0	0	0	3	8	3	8
71-15	2	S	2.5n00	70	139	Y	4	5	0	0	0	0	0	0	9	4	9	4
71-15	2	S	2.5n00	70	140	Y	0	0	0	0	0	0	0	0	0	0	0	0
71-15	2	S	2.5n00	71	141	Y	0	0	0	0	0	0	0	0	0	0	0	0
71-15	2	S	2.5n00	71	142	Y	0	0	0	0	0	0	0	0	0	0	0	0
71-15	2	S	2.5n00	72	143	Y	0	0	0	0	0	0	0	0	0	0	0	0
71-15	2	S	2.5n00	72	144	Y	0	0	0	0	0	0	0	0	0	0	0	0
71-15	2	S	2.5n00	73	145	Y	0	0	0	0	0	0	0	0	0	0	0	0
71-15	2	S	2.5n00	73	146	Y	0	0	0	0	0	0	0	0	0	0	0	0
71-15	2	S	2.5n00	74	147	Y	0	0	0	0	0	0	0	0	0	0	0	0
71-15	2	S	2.5n00	74	148	Y	0	0	0	0	0	0	0	0	0	0	0	0
71-15	2	S	2.5n00	75	149	Y	0	0	0	0	0	0	0	0	0	0	0	0
71-15	2	S	2.5n00	75	150	Y	0	0	0	0	0	0	0	0	0	0	0	0
71-15	2	S	2.5n00	76	151	Y	0	0	0	0	0	0	0	0	0	0	0	0
71-15	2	S	2.5n00	76	152	Y	0	0	0	0	0	0	0	0	0	0	0	0
71-15	2	S	2.5n00	77	153	Y	0	0	0	0	0	0	0	0	0	0	0	0
71-15	2	S	2.5n00	77	154	Y	0	0	0	0	0	0	0	0	0	0	0	0
71-15	2	S	2.5n00	78	155	Y	0	0	0	0	0	0	0	0	0	0	0	0
71-15	2	S	2.5n00	78	156	Y	0	0	0	0	0	0	0	0	0	0	0	0
71-15	2	S	2.5n00	79	157	Y	0	0	0	0	0	0	0	0	0	0	0	0
71-15	2	S	2.5n00	79	158	Y	0	0	0	0	0	0	0	0	0	0	0	0
71-15	2	S	2.5n00	80	159	Y	0	0	0	0	0	0	0	0	0	0	0	0
71-15	2	S	2.5n00	80	160	Y	0	0	0	0	0	0	0	0	0	0	0	0

## DOMINANT LETHAL GENE STUDY OF COMPOUND 71-15

TEST MATERIAL	WEEK	S/M. DOSE	MALE NO.	FEMALE NO.	PREG.	GUM ARABIC			CORPORA LUTEA			LATE DEATHS		
						L	R	H	L	R	H	L	R	H
TEM15	2	S	•0.002	11	21	Y	Y	Y	Y	Y	Y	Y	Y	Y
TEM15	2	S	•0.002	11	22									
TEM15	2	S	•0.002	12	23									
TEM15	2	S	•0.002	12	24									
TEM15	2	S	•0.002	13	25									
TEM15	2	S	•0.002	13	26									
TEM15	2	S	•0.002	14	27									
TEM15	2	S	•0.002	14	28									
TEM15	2	S	•0.002	15	29									
TFM15	2	S	•0.002	15	31									
TFM15	2	S	•0.002	16	31									
TEM15	2	S	•0.002	16	32									
TFM15	2	S	•0.002	16	33									
TEM15	2	S	•0.002	17	34									
TEM15	2	S	•0.002	17	35									
TEM15	2	S	•0.002	18	36									
TFM15	2	S	•0.002	18	37									
TEM15	2	S	•0.002	19	38									
TEM15	2	S	•0.002	19	39									
TEM15	2	S	•0.002	20	40									
TEM15	2	S	•0.002	20										
CNTRL15	2	M	0.0000	1	1									
CNTRL15	2	M	0.0000	2	2									
CNTRL15	2	M	0.00100	2	3									
CNTRL15	2	M	0.00000	3	4									
CNTRL15	2	M	0.00100	3	5									
CNTRL15	2	M	0.00000	4	6									
CNTRL15	2	M	0.00000	4	7									
CNTRL15	2	M	0.00000	5	8									
CNTRL15	2	M	0.00000	5	9									
CNTRL15	2	M	0.00000	6	10									
CNTRL15	2	M	0.00000	6	11									
CNTRL15	2	M	0.00000	6	12									
CNTRL15	2	M	0.00000	7	13									
CNTRL15	2	M	0.00000	7	14									
CNTRL15	2	M	0.00000	8	15									
CNTRL15	2	M	0.00000	8	16									
CNTRL15	2	M	0.00000	9	17									
CNTRL15	2	M	0.00000	9	18									
CNTRL15	2	M	0.00000	10	19									
CNTRL15	2	M	0.00000	10	20									

## DOMINANT LETHAL GENE STUDY OF COMPOUND 11-15

GUM ARABIC

PAGE 5

TEST MATERIAL	WEEK	SEX	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS			DEATHS			LATE DEATHS			CORPORA		
							L	R	L	R	L	R	L	R	L	R	L	R
71-15	2	M	•0300	41	31	Y	3	4	9	0	0	0	3	4	3	9	3	9
71-15	2	M	•0300	41	32	Y	3	3	9	0	0	0	3	3	6	3	6	3
71-15	2	M	•0300	42	34	Y	3	7	3	1	0	1	2	4	6	4	7	4
71-15	2	M	•0300	42	34	Y	3	6	6	0	0	0	0	4	6	4	8	4
71-15	2	M	•0300	43	45	Y	3	10	0	0	0	0	0	0	0	0	0	0
71-15	2	M	•0300	43	46	Y	3	11	0	0	0	0	0	0	0	0	0	0
71-15	2	M	•0300	44	87	Y	3	5	0	1	0	0	0	0	0	0	0	0
71-15	2	M	•0300	44	88	Y	3	5	6	0	0	0	0	0	0	0	0	0
71-15	2	M	•0300	45	89	Y	3	5	9	0	0	0	0	0	0	0	0	0
71-15	2	M	•0300	45	90	Y	3	5	9	0	0	0	0	0	0	0	0	0
71-15	2	M	•0300	46	91	Y	3	7	8	7	0	0	0	0	0	0	0	0
71-15	2	M	•0300	46	92	Y	3	7	8	7	0	0	0	0	0	0	0	0
71-15	2	M	•0300	47	93	Y	3	7	8	7	0	0	0	0	0	0	0	0
71-15	2	M	•0300	47	94	Y	3	5	5	6	0	0	0	0	0	0	0	0
71-15	2	M	•0300	48	95	Y	3	5	6	6	0	0	0	0	0	0	0	0
71-15	2	M	•0300	48	96	Y	3	5	6	6	0	0	0	0	0	0	0	0
71-15	2	M	•0300	49	97	Y	3	5	6	6	0	0	0	0	0	0	0	0
71-15	2	M	•0300	49	98	Y	3	5	6	6	0	0	0	0	0	0	0	0
71-15	2	M	•0300	50	99	Y	3	7	7	7	0	0	0	0	0	0	0	0
71-15	2	M	•0300	50	100	Y	3	7	7	7	0	0	0	0	0	0	0	0
71-15	2	M	•0500	51	101	Y	3	8	8	8	0	0	0	0	0	0	0	0
71-15	2	M	•0500	51	102	Y	3	6	6	7	0	0	0	0	0	0	0	0
71-15	2	M	•0500	52	103	Y	3	6	6	7	1	1	2	7	6	7	6	7
71-15	2	M	•0500	52	104	Y	3	6	6	7	1	1	2	7	6	7	6	7
71-15	2	M	•0500	53	105	Y	3	7	7	7	0	0	0	0	0	0	0	0
71-15	2	M	•0500	53	106	Y	3	7	7	7	0	0	0	0	0	0	0	0
71-15	2	M	•0500	54	107	Y	3	10	5	5	0	0	0	0	0	0	0	0
71-15	2	M	•0500	54	108	Y	3	6	5	5	0	0	0	0	0	0	0	0
71-15	2	M	•0500	55	109	Y	3	13	12	12	0	0	0	0	0	0	0	0
71-15	2	M	•0500	55	110	Y	3	15	4	4	7	7	7	7	6	5	5	5
71-15	2	M	•0500	56	111	Y	3	7	7	7	7	7	7	7	6	7	6	7
71-15	2	M	•0500	56	112	Y	3	5	5	5	5	5	5	5	4	4	4	4
71-15	2	M	•0500	57	113	Y	3	6	7	7	5	5	5	5	4	4	4	4
71-15	2	M	•0500	57	114	Y	3	4	4	4	4	4	4	4	3	3	3	3
71-15	2	M	•0500	58	115	Y	3	4	4	4	4	4	4	4	3	3	3	3
71-15	2	M	•0500	58	116	Y	3	4	4	4	4	4	4	4	3	3	3	3
71-15	2	M	•0500	59	117	Y	3	4	4	4	4	4	4	4	3	3	3	3
71-15	2	M	•0500	59	118	Y	3	4	4	4	4	4	4	4	3	3	3	3
71-15	2	M	•0500	60	119	Y	3	4	4	4	4	4	4	4	3	3	3	3
71-15	2	M	•0500	60	120	Y	3	4	4	4	4	4	4	4	3	3	3	3

## DOMINANT LETHAL GENE STUDY OF COMPOUND 71-15

## GUM ARABIC

PAGE 10

TEST MATERIAL	WEEK	S/N	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS			EARLY DEATHS			LATE DEATHS			CORPORA LUTEA		
							L	R	L	R	L	R	L	R	L	R	L	R
71-15	2	M	5.0000	61	121	Y	6	7	1	0	0	0	7	5				
71-15	2	M	5.0000	61	122	Y	7	6	0	0	0	0	7	6				
71-15	2	M	5.0000	62	123	Y	4	7	0	0	0	0	4	7				
71-15	2	M	5.0000	62	124	Y	-9	-0	-0	-0	-0	-0	-0	-0				
71-15	2	M	5.0000	63	125	Y	-4	8	-0	-0	-0	-0	-0	-0				
71-15	2	M	5.0000	63	126	Y	5	7	-0	-0	-0	-0	-0	-0				
71-15	2	M	5.0000	64	127	Y	8	4	-0	-0	-0	-0	-0	-0				
71-15	2	M	5.0000	64	128	Y	-5	6	1	0	0	0	0	0				
71-15	2	M	5.0000	65	129	Y	5	5	-0	-0	-0	-0	-0	-0				
71-15	2	M	5.0000	65	130	Y	-8	4	1	0	0	0	0	0				
71-15	2	M	5.0000	66	131	Y	-0	5	2	0	0	0	0	0				
71-15	2	M	5.0000	66	132	Y	4	7	1	0	0	0	0	0				
71-15	2	M	5.0000	67	133	Y	3	9	4	4	0	0	0	0				
71-15	2	M	5.0000	67	134	Y	7	4	6	4	0	0	0	0				
71-15	2	M	5.0000	68	135	Y	1	4	2	0	0	0	0	0				
71-15	2	M	5.0000	68	136	Y	0	5	0	0	0	0	0	0				
71-15	2	M	5.0000	69	137	Y	6	9	0	0	0	0	0	0				
71-15	2	M	5.0000	69	138	Y	7	7	0	0	0	0	0	0				
71-15	2	M	5.0000	70	139	Y	-0	-0	-0	-0	-0	-0	-0	-0				
71-15	2	M	5.0000	70	140	Y	-0	-0	-0	-0	-0	-0	-0	-0				

## DOMINANT LETHAL GENE STUDY OF COMPOUND 71-15

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TEST MATERIAL	WEEK	SEX	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS	DEATHS	EARLY			LATE		
									L	R	L	R	L	R
CNTRL15	3	S	0.000	1	1	Y	7	1	0	0	0	0	7	5
CNTRL15	3	S	0.000	1	2	Y	3	0	1	0	0	0	1	1
CNTRL15	3	S	0.000	2	3	Y	5	6	0	0	0	0	4	6
CNTRL15	3	S	0.000	2	4	Y	7	6	0	0	0	0	7	6
CNTRL15	3	S	0.000	3	5	Y	3	5	0	0	0	0	3	7
CNTRL15	3	S	0.000	3	6	Y	4	9	0	0	0	0	4	9
CNTRL15	3	S	0.000	4	7	Y	2	10	0	0	0	0	2	11
CNTRL15	3	S	0.000	4	8	Y	6	6	0	0	0	0	6	6
CNTRL15	3	S	0.000	5	9	Y	2	9	0	0	0	0	4	2
CNTRL15	3	S	0.000	5	10	Y	4	2	1	0	0	0	5	7
CNTRL15	3	S	0.000	6	11	Y	5	8	0	0	0	0	5	8
CNTRL15	3	S	0.000	6	12	Y	0	0	-1	0	0	0	-1	0
CNTRL15	3	S	0.000	7	13	Y	7	4	1	0	0	0	7	5
CNTRL15	3	S	0.000	7	14	Y	4	7	0	0	0	0	5	7
CNTRL15	3	S	0.000	8	15	Y	5	1	0	0	0	0	6	7
CNTRL15	3	S	0.000	8	16	Y	3	8	0	0	0	0	4	6
CNTRL15	3	S	0.000	9	17	Y	4	9	0	0	0	0	4	10
CNTRL15	3	S	0.000	9	18	Y	6	6	0	0	0	0	6	6
CNTRL15	3	S	0.000	10	19	Y	5	X	0	0	0	0	5	X
CNTRL15	3	S	0.000	10	20	N	-1	0	-1	0	0	0	-1	0
71-15	3	S	0.300	51	101	Y	7	7	1	0	0	0	3	7
71-15	3	S	0.300	51	162	Y	7	7	1	0	0	1	7	7
71-15	3	S	0.300	52	163	Y	7	4	0	0	0	0	4	6
71-15	3	S	0.300	52	164	Y	5	7	0	0	0	0	-1	5
71-15	3	S	0.300	53	105	Y	4	6	-1	0	0	0	4	7
71-15	3	S	0.300	53	165	Y	6	6	0	0	0	0	-1	6
71-15	3	S	0.300	54	107	Y	4	6	-1	0	0	0	3	5
71-15	3	S	0.300	54	108	Y	5	7	0	0	0	0	4	7
71-15	3	S	0.300	55	169	Y	4	6	0	0	0	0	4	6
71-15	3	S	0.300	55	110	Y	5	1	0	0	0	0	5	5
71-15	3	S	0.300	56	111	Y	5	10	0	0	0	0	2	11
71-15	3	S	0.300	56	112	Y	-1	0	-1	0	0	0	-1	0
71-15	3	S	0.300	57	113	Y	3	12	0	1	0	0	3	13
71-15	3	S	0.300	57	114	Y	6	6	0	0	0	0	6	6
71-15	3	S	0.300	58	115	Y	-1	0	-1	0	0	0	-1	0
71-15	3	S	0.300	58	116	Y	7	6	0	0	0	0	-1	6
71-15	3	S	0.300	59	117	Y	4	9	0	0	0	0	3	9
71-15	3	S	0.300	60	118	Y	5	6	0	0	0	0	-1	6
71-15	3	S	0.300	60	120	N	-1	0	-1	0	0	0	-1	0

## DOMINANT LETHAL GENE STUDY OF COMPOUND 71-15

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GUM ARABIC

TEST MATERIAL	WEEK	S/M	DOSF	MALE NO.	FEMALE NO.	PRFG.	IMPLANTS			EARLY DEATHS			LATE DEATHS			CORPORA		
							L	H	R	L	R	H	L	R	H	L	R	H
71-15	3	S	2.5000	61	121	Y	9	6	0	0	0	0	1	0	0	6	6	6
71-15	3	S	2.5000	61	122	Y	9	4	0	0	0	0	0	0	0	4	4	4
71-15	3	S	2.5000	62	123	Y	9	4	0	0	0	0	0	0	0	4	4	4
71-15	3	S	2.5000	62	124	Y	1C	4	0	0	0	0	0	0	0	7	7	7
71-15	3	S	2.5000	63	125	Y	1C	2	0	0	0	0	0	0	0	5	5	7
71-15	3	S	2.5000	63	126	Y	5	7	0	1	0	0	0	0	0	5	5	7
71-15	3	S	2.5000	64	127	N	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
71-15	3	S	2.5000	64	128	Y	4	6	0	0	0	0	0	0	0	2	2	2
71-15	3	S	2.5000	65	129	Y	1C	1	0	0	0	0	0	0	0	1	0	1
71-15	3	S	2.5000	65	130	Y	1C	0	0	0	0	0	0	0	0	0	0	0
71-15	3	S	2.5000	66	131	Y	5	5	5	1	0	0	0	0	0	0	0	0
71-15	3	S	2.5000	66	132	Y	5	5	5	0	0	0	0	0	0	0	0	0
71-15	3	S	2.5000	67	133	Y	2	2	2	0	0	0	0	0	0	0	0	0
71-15	3	S	2.5000	67	134	Y	1C	5	5	1	0	0	0	0	0	0	0	0
71-15	3	S	2.5000	68	135	Y	5	6	0	0	0	0	0	0	0	0	0	0
71-15	3	S	2.5000	68	136	Y	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
71-15	3	S	2.5000	69	137	Y	0	0	0	0	0	0	0	0	0	0	0	0
71-15	3	S	2.5000	69	138	Y	7	8	0	0	0	0	0	0	0	7	6	6
71-15	3	S	2.5000	70	139	Y	7	6	1	1	0	0	0	0	0	7	6	5
71-15	3	S	2.5000	70	140	Y	5	1	0	0	0	0	0	0	0	8	5	5
71-15	3	S	2.5000	71	141	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
71-15	3	S	2.5000	71	142	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
71-15	3	S	2.5000	72	143	Y	7	6	0	0	0	0	0	0	0	7	6	7
71-15	3	S	2.5000	72	144	Y	4	7	6	0	0	0	0	0	0	5	5	5
71-15	3	S	2.5000	73	145	Y	5	5	5	0	0	0	0	0	0	7	6	6
71-15	3	S	2.5000	73	146	Y	7	7	6	0	0	0	0	0	0	5	5	5
71-15	3	S	2.5000	74	147	Y	6	6	0	0	0	0	0	0	0	6	4	4
71-15	3	S	2.5000	74	148	Y	3	10	6	0	0	0	0	0	0	3	11	6
71-15	3	S	2.5000	75	149	Y	5	6	0	0	0	0	0	0	0	5	6	6
71-15	3	S	2.5000	75	150	Y	5	5	5	0	0	0	0	0	0	3	1	3
71-15	3	S	2.5000	76	151	Y	5	5	5	0	0	0	0	0	0	7	9	7
71-15	3	S	2.5000	76	152	Y	7	7	9	0	0	0	0	0	0	7	7	7
71-15	3	S	2.5000	77	153	Y	5	7	5	0	0	0	0	0	0	10	5	5
71-15	3	S	2.5000	77	154	Y	10	5	9	0	0	0	0	0	0	17	10	5
71-15	3	S	2.5000	78	155	Y	17	9	4	0	0	0	0	0	0	6	5	5
71-15	3	S	2.5000	78	156	Y	4	5	6	0	0	0	0	0	0	5	6	5
71-15	3	S	2.5000	79	157	Y	5	7	5	0	0	0	0	0	0	1	1	1
71-15	3	S	2.5000	79	158	Y	5	8	7	0	0	0	0	0	0	3	2	2
71-15	3	S	2.5000	80	159	Y	7	5	0	0	0	0	0	0	0	0	0	0
71-15	3	S	2.5000	80	160	Y	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0

## DOMINANT LETHAL GENE STUDY OF COMPOUND 71-15

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TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PHFG.	IMPLANTS	EARLY DEATHS	LATE DEATHS	COPIA		
										L	R	L
TEM15	3	S	•0002	11	21	Y	6	1	0	0	0	0
TEM15	3	S	•0002	11	22	Y	6	4	1	0	0	0
TEM15	3	S	•0002	12	23	Y	2	1	0	0	0	0
TEM15	3	S	•0002	12	24	Y	1	0	0	0	0	0
TEM15	3	S	•0002	13	25	Y	4	6	0	0	0	0
TEM15	3	S	•0002	13	26	Y	7	7	0	0	0	0
TEM15	3	S	•0002	14	27	Y	5	6	0	0	0	0
TEM15	3	S	•0002	14	28	N	0	0	-0	-0	-0	-0
TEM15	3	S	•0002	15	29	Y	6	5	0	0	0	0
TEM15	3	S	•0002	15	30	Y	6	5	0	0	0	0
TEM15	3	S	•0002	16	31	Y	0	7	3	4	1	0
TEM15	3	S	•0002	16	32	Y	0	0	-0	-0	-0	-0
TEM15	3	S	•0002	17	33	Y	3	0	0	-7	-1	-3
TEM15	3	S	•0002	17	34	Y	0	0	-0	-0	-0	-0
TEM15	3	S	•0002	18	35	Y	5	6	0	0	0	0
TEM15	3	S	•0002	18	36	Y	1	5	1	4	4	6
TEM15	3	S	•0002	19	37	Y	4	6	0	0	1	1
TEM15	3	S	•0002	19	38	Y	5	6	0	0	0	0
TEM15	3	S	•0002	20	39	Y	4	8	0	0	5	8
TEM15	3	S	•0002	20	40	Y	5	6	4	0	0	5
CNTRL15	3	M	0.0000	1	1	Y	4	4	0	0	0	0
CNTRL15	3	M	0.0000	1	2	Y	5	5	0	0	0	0
CNTRL15	3	M	0.0000	2	3	Y	0	0	-0	-0	-0	-0
CNTRL15	3	M	0.0000	2	4	Y	3	3	1	0	0	0
CNTRL15	3	M	0.0000	3	5	Y	0	0	-0	-0	-0	-0
CNTRL15	3	M	0.0000	3	6	Y	0	0	-0	-0	-0	-0
CNTRL15	3	M	0.0000	4	7	Y	0	0	-0	-0	-0	-0
CNTRL15	3	M	0.0000	4	8	Y	0	0	-0	-0	-0	-0
CNTRL15	3	M	0.0000	5	9	Y	0	0	-0	-0	-0	-0
CNTRL15	3	M	0.0000	5	10	Y	0	0	-0	-0	-0	-0
CNTRL15	3	M	0.0000	6	11	Y	7	8	0	0	0	0
CNTRL15	3	M	0.0000	6	12	Y	8	6	0	0	0	0
CNTRL15	3	M	0.0000	7	13	Y	0	0	-0	-0	-0	-0
CNTRL15	3	M	0.0000	7	14	Y	0	0	-0	-0	-0	-0
CNTRL15	3	M	0.0000	8	15	Y	0	0	-0	-0	-0	-0
CNTRL15	3	M	0.0000	8	16	Y	0	0	-0	-0	-0	-0
CNTRL15	3	M	0.0000	9	17	Y	0	0	-0	-0	-0	-0
CNTRL15	3	M	0.0000	9	18	Y	0	0	-0	-0	-0	-0
CNTRL15	3	M	0.0000	10	19	Y	0	0	-0	-0	-0	-0
CNTRL15	3	M	0.0000	10	20	Y	0	0	-0	-0	-0	-0

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## DOMINANT LETHAL GENE STUDY OF COMPANY #11-14

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TEST MATERIAL	WEEK	S/M	DOSE	FEMALE NO.	PREG.	IMPLANTS	EARLY DEATHS	LATE DEATHS	GUM ARATIC		
									L	R	CORPORA LUTIFIA
71-15	3	M	•0300	41	H1	Y	3	3	7	7	
71-15	3	M	•0300	41	H2		6	6	7	7	
71-15	3	M	•0300	42	H3		6	6	7	7	
71-15	3	M	•0300	42	H4		6	6	7	7	
71-15	3	M	•0300	43	H5		6	6	7	7	
71-15	3	M	•0300	43	H6		6	6	7	7	
71-15	3	M	•0300	44	H7		6	6	7	7	
71-15	3	M	•0300	44	H8		6	6	7	7	
71-15	3	M	•0300	45	H9		6	6	7	7	
71-15	3	M	•0300	45	H10		6	6	7	7	
71-15	3	M	•0300	46	H11		6	6	7	7	
71-15	3	M	•0300	46	H12		6	6	7	7	
71-15	3	M	•0300	47	H13		6	6	7	7	
71-15	3	M	•0300	47	H14		6	6	7	7	
71-15	3	M	•0300	47	H15		6	6	7	7	
71-15	3	M	•0300	48	H16		6	6	7	7	
71-15	3	M	•0300	48	H17		6	6	7	7	
71-15	3	M	•0300	49	H18		6	6	7	7	
71-15	3	M	•0300	49	H19		6	6	7	7	
71-15	3	M	•0300	50	H20		6	6	7	7	
71-15	3	M	•0300	50	H21		6	6	7	7	
71-15	3	M	•0300	51	H22		6	6	7	7	
71-15	3	M	•0300	51	H23		6	6	7	7	
71-15	3	M	•0300	52	H24		6	6	7	7	
71-15	3	M	•0300	52	H25		6	6	7	7	
71-15	3	M	•0300	53	H26		6	6	7	7	
71-15	3	M	•0300	53	H27		6	6	7	7	
71-15	3	M	•0300	54	H28		6	6	7	7	
71-15	3	M	•0300	54	H29		6	6	7	7	
71-15	3	M	•0300	54	H30		6	6	7	7	
71-15	3	M	•0300	55	H31		6	6	7	7	
71-15	3	M	•0300	55	H32		6	6	7	7	
71-15	3	M	•0300	56	H33		6	6	7	7	
71-15	3	M	•0300	56	H34		6	6	7	7	
71-15	3	M	•0300	57	H35		6	6	7	7	
71-15	3	M	•0300	57	H36		6	6	7	7	
71-15	3	M	•0300	58	H37		6	6	7	7	
71-15	3	M	•0300	58	H38		6	6	7	7	
71-15	3	M	•0300	59	H39		6	6	7	7	
71-15	3	M	•0300	59	H40		6	6	7	7	
71-15	3	M	•0300	60	H41		6	6	7	7	
71-15	3	M	•0300	60	H42		6	6	7	7	
71-15	3	M	•0300	61	H43		6	6	7	7	

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## DOMINANT LETHAL GENE STUDY OF COMPOUND 71-15

## GUM ARABIC

PAGE 15

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS			EARLY DEATHS			LATE DEATHS			CORPORA LUTEA		
							L	R	L	R	L	R	L	R	L	R	L	R
71-15	3	M	5.0000	61	121	Y	3	5	-0	-0	5	6	9	8	6	6	5	6
71-15	3	M	5.0000	61	122	Y	7	5	0	0	9	7	7	4	4	4	4	5
71-15	3	M	5.0000	62	123	Y	-0	-0	-0	-0	9	7	7	5	6	6	6	6
71-15	3	M	5.0000	62	124	Y	-7	6	1	0	6	7	7	5	6	6	6	6
71-15	3	M	5.0000	63	125	Y	5	6	0	0	6	7	7	5	6	6	6	6
71-15	3	M	5.0000	63	126	Y	5	3	0	0	6	7	7	5	6	6	6	6
71-15	3	M	5.0000	64	127	Y	6	6	0	1	6	7	7	5	6	6	6	6
71-15	3	M	5.0000	64	128	Y	5	6	0	1	6	7	7	5	6	6	6	6
71-15	3	M	5.0000	65	129	Y	6	6	0	1	6	7	7	5	6	6	6	6
71-15	3	M	5.0000	65	130	Y	5	5	0	1	6	7	7	5	6	6	6	6
71-15	3	M	5.0000	66	131	Y	6	6	0	1	6	7	7	5	6	6	6	6
71-15	3	M	5.0000	66	132	Y	5	5	0	1	6	7	7	5	6	6	6	6
71-15	3	M	5.0000	67	133	Y	7	2	0	2	3	3	3	3	3	3	3	3
71-15	3	M	5.0000	67	134	Y	5	4	0	1	6	7	7	5	6	6	6	6
71-15	3	M	5.0000	68	135	Y	6	7	0	1	6	7	7	5	6	6	6	6
71-15	3	M	5.0000	68	136	Y	5	5	0	1	6	7	7	5	6	6	6	6
71-15	3	M	5.0000	69	137	Y	6	6	0	1	6	7	7	5	6	6	6	6
71-15	3	M	5.0000	69	138	Y	5	4	0	2	3	3	3	3	3	3	3	3
71-15	3	M	5.0000	70	139	Y	6	7	0	1	6	7	7	5	6	6	6	6
71-15	3	M	5.0000	70	140	Y	5	5	0	1	6	7	7	5	6	6	6	6

DOMINANT LETHAL GENE STUDY OF COMPOUND 71-15

JULIA ARABIC

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## DOMINANT LETHAL GENE STUDY OF COMPOUND 71-15

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## GUM ARAHIC

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PHFG.	IMPLANTS	LATE DEATHS	COPORA LUTEA
71-15	4	s	2.5000	61	121	y	5	6	9
71-15	4	s	2.5000	51	122	y	5	6	9
71-15	4	s	2.5000	62	123	y	5	6	9
71-15	4	s	2.5000	62	124	y	5	6	9
71-15	4	s	2.5000	63	125	y	5	6	9
71-15	4	s	2.5000	63	126	y	5	6	9
71-15	4	s	2.5000	64	127	y	5	6	9
71-15	4	s	2.5000	64	128	y	5	6	9
71-15	4	s	2.5000	65	129	y	5	6	9
71-15	4	s	2.5000	65	130	y	5	6	9
71-15	4	s	2.5000	66	131	y	5	6	9
71-15	4	s	2.5000	66	132	y	5	6	9
71-15	4	s	2.5000	67	133	y	5	6	9
71-15	4	s	2.5000	67	134	y	5	6	9
71-15	4	s	2.5000	68	135	y	5	6	9
71-15	4	s	2.5000	68	136	y	5	6	9
71-15	4	s	2.5000	69	137	y	5	6	9
71-15	4	s	2.5000	69	138	y	5	6	9
71-15	4	s	2.5000	70	139	y	5	6	9
71-15	4	s	2.5000	70	140	y	5	6	9
71-15	4	s	2.5000	71	141	y	5	6	9
71-15	4	s	2.5000	71	142	y	5	6	9
71-15	4	s	2.5000	72	143	y	5	6	9
71-15	4	s	2.5000	72	144	y	5	6	9
71-15	4	s	2.5000	73	145	y	5	6	9
71-15	4	s	2.5000	73	146	y	5	6	9
71-15	4	s	2.5000	74	147	y	5	6	9
71-15	4	s	2.5000	74	148	y	5	6	9
71-15	4	s	2.5000	75	149	y	5	6	9
71-15	4	s	2.5000	75	150	y	5	6	9
71-15	4	s	2.5000	76	151	y	5	6	9
71-15	4	s	2.5000	76	152	y	5	6	9
71-15	4	s	2.5000	77	153	y	5	6	9
71-15	4	s	2.5000	77	154	y	5	6	9
71-15	4	s	2.5000	78	155	y	5	6	9
71-15	4	s	2.5000	78	156	y	5	6	9
71-15	4	s	2.5000	79	157	y	5	6	9
71-15	4	s	2.5000	79	158	y	5	6	9
71-15	4	s	2.5000	80	159	y	5	6	9
71-15	4	s	2.5000	80	160	y	5	6	9

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## DOMINANT LETHAL GENE STUDY OF COMPOUND 71-15

GUARANIC

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TEST MATERIAL	WEEK	S/M	DOSE	FEMALE NO.	PRFG.	IMPLANTS L R	EARLY DEATHS			LATE DEATHS			CORPORA L R		
							L	R	L	R	L	R	L	R	L
TEM15	4	S	•0.002	11	21	4	0	0	2	0	5	4	0	0	-6
TEM15	4	S	•0.002	11	22	-1	-0	-0	-0	-0	1	3	1	0	-3
TEM15	4	S	•0.002	12	23	0	1	0	0	0	0	0	0	0	0
TEM15	4	S	•0.002	12	24	-0	-0	-0	-0	-0	0	0	0	0	0
TEM15	4	S	•0.002	13	25	3	7	0	0	2	5	4	0	0	4
TEM15	4	S	•0.002	13	26	3	8	0	0	0	0	0	0	0	1
TEM15	4	S	•0.002	14	27	1	0	1	0	0	0	0	0	0	0
TEM15	4	S	•0.002	14	26	-0	-0	-0	-0	-0	0	0	0	0	0
TEM15	4	S	•0.002	15	29	-2	10	0	0	0	0	0	0	0	0
TEM15	4	S	•0.002	15	30	-0	-0	-0	-0	-0	0	0	0	0	0
TEM15	4	S	•0.002	16	31	2	2	2	0	0	0	0	0	0	0
TEM15	4	S	•0.002	16	32	3	6	0	1	3	4	5	6	6	7
TEM15	4	S	•0.002	17	33	5	5	0	1	0	0	0	0	0	0
TEM15	4	S	•0.002	17	34	1	1	0	0	1	1	1	1	1	1
TEM15	4	S	•0.002	18	35	-0	-0	-0	-0	-0	0	0	0	0	0
TEM15	4	S	•0.002	18	36	-4	4	4	4	0	0	0	0	0	0
TEM15	4	S	•0.002	19	37	2	3	0	0	0	0	0	0	0	0
TEM15	4	S	•0.002	19	38	5	2	1	0	0	0	0	0	0	0
TEM15	4	S	•0.002	20	39	-2	-3	-0	-0	-0	0	0	0	0	0
TEM15	4	S	•0.002	20	40	3	3	0	0	0	0	0	0	0	0
CNTRL15	4	S	0.00000	1	1	2	3	0	0	0	0	0	0	0	0
CNTRL15	4	S	0.00000	1	2	3	4	0	0	0	0	0	0	0	0
CNTRL15	4	S	0.00000	2	3	5	6	0	0	0	0	0	0	0	0
CNTRL15	4	S	0.00000	2	3	5	7	0	0	0	0	0	0	0	0
CNTRL15	4	S	0.00000	3	5	7	7	0	0	0	0	0	0	0	0
CNTRL15	4	S	0.00000	3	6	7	7	0	0	0	0	0	0	0	0
CNTRL15	4	S	0.00000	4	7	5	7	0	0	0	0	0	0	0	0
CNTRL15	4	S	0.00000	4	8	7	7	0	0	0	0	0	0	0	0
CNTRL15	4	S	0.00000	5	9	7	6	0	0	0	0	0	0	0	0
CNTRL15	4	S	0.00000	5	10	6	6	0	0	0	0	0	0	0	0
CNTRL15	4	S	0.00000	6	11	7	7	0	0	0	0	0	0	0	0
CNTRL15	4	S	0.00000	6	12	7	7	0	0	0	0	0	0	0	0
CNTRL15	4	S	0.00000	7	13	7	7	0	0	0	0	0	0	0	0
CNTRL15	4	S	0.00000	7	14	7	7	0	0	0	0	0	0	0	0
CNTRL15	4	S	0.00000	8	15	7	7	0	0	0	0	0	0	0	0
CNTRL15	4	S	0.00000	8	16	7	7	0	0	0	0	0	0	0	0
CNTRL15	4	S	0.00000	9	17	7	7	0	0	0	0	0	0	0	0
CNTRL15	4	S	0.00000	9	18	7	7	0	0	0	0	0	0	0	0
CNTRL15	4	S	0.00000	10	19	7	7	0	0	0	0	0	0	0	0
CNTRL15	4	S	0.00000	10	20	7	7	0	0	0	0	0	0	0	0

## DOMINANT LETHAL GENE STUDY OF COMPOUND 71-15

PAGE 1#

TEST MATERIAL	WEEK	S/H	DOSE	FEMALE NO.	PRFG.	GUM ANAHE				COMPOUND			
						L	H	DEATHS	L	H	DEATHS	L	H
71-15	4		0.300	41	81	5	6	4	5	6	4	5	6
71-15	4		0.300	41	82	5	6	4	5	6	4	5	6
71-15	4		0.300	42	83	5	6	4	5	6	4	5	6
71-15	4		0.300	42	84	5	6	4	5	6	4	5	6
71-15	4		0.300	43	85	5	6	4	5	6	4	5	6
71-15	4		0.300	43	86	5	6	4	5	6	4	5	6
71-15	4		0.300	43	87	5	6	4	5	6	4	5	6
71-15	4		0.300	44	88	5	6	4	5	6	4	5	6
71-15	4		0.300	44	89	5	6	4	5	6	4	5	6
71-15	4		0.300	45	90	5	6	4	5	6	4	5	6
71-15	4		0.300	45	91	5	6	4	5	6	4	5	6
71-15	4		0.300	46	92	5	6	4	5	6	4	5	6
71-15	4		0.300	46	93	5	6	4	5	6	4	5	6
71-15	4		0.300	47	94	5	6	4	5	6	4	5	6
71-15	4		0.300	47	95	5	6	4	5	6	4	5	6
71-15	4		0.300	48	96	5	6	4	5	6	4	5	6
71-15	4		0.300	48	97	5	6	4	5	6	4	5	6
71-15	4		0.300	49	98	5	6	4	5	6	4	5	6
71-15	4		0.300	49	99	5	6	4	5	6	4	5	6
71-15	4		0.300	50	100	5	6	4	5	6	4	5	6
71-15	4		0.300	50									
71-15	4		2.500	51	101	6	7	5	6	7	6	7	8
71-15	4		2.500	51	102	6	7	5	6	7	6	7	8
71-15	4		2.500	52	103	6	7	5	6	7	6	7	8
71-15	4		2.500	52	104	6	7	5	6	7	6	7	8
71-15	4		2.500	52	105	6	7	5	6	7	6	7	8
71-15	4		2.500	53	106	6	7	5	6	7	6	7	8
71-15	4		2.500	54	107	6	7	5	6	7	6	7	8
71-15	4		2.500	54	108	6	7	5	6	7	6	7	8
71-15	4		2.500	54	109	6	7	5	6	7	6	7	8
71-15	4		2.500	55	110	6	7	5	6	7	6	7	8
71-15	4		2.500	55	111	6	7	5	6	7	6	7	8
71-15	4		2.500	56	112	6	7	5	6	7	6	7	8
71-15	4		2.500	56	113	6	7	5	6	7	6	7	8
71-15	4		2.500	57	114	6	7	5	6	7	6	7	8
71-15	4		2.500	58	115	6	7	5	6	7	6	7	8
71-15	4		2.500	58	116	6	7	5	6	7	6	7	8
71-15	4		2.500	59	117	6	7	5	6	7	6	7	8
71-15	4		2.500	59	118	6	7	5	6	7	6	7	8
71-15	4		2.500	60	119	6	7	5	6	7	6	7	8
71-15	4		2.500	60	120	6	7	5	6	7	6	7	8

SP

## DOMINANT LETHAL GENE STUDY OF COMPOUND 71-15

## GUM ARABIC

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TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS			EARLY DEATHS			LATE DEATHS			CORPORA LUTEA		
							L	R	L	R	L	R	L	R	L	R	L	R
71-15	4	M	5.0000	61	121	Y	4	7	0	0	0	0	0	0	4	7	7	9
71-15	4	M	5.0000	61	122	Y	4	9	0	0	0	0	0	0	4	4	4	9
71-15	4	M	5.0000	62	123	Y	3	7	0	0	0	0	0	0	5	7	7	8
71-15	4	M	5.0000	62	124	Y	5	7	0	0	0	0	0	0	6	8	8	8
71-15	4	M	5.0000	63	125	Y	5	7	0	0	0	0	0	0	-0	-0	-0	-0
71-15	4	M	5.0000	63	126	Y	6	7	0	0	0	0	0	0	-0	-0	-0	-0
71-15	4	M	5.0000	64	127	N	-0	-0	-0	-0	0	0	0	0	-0	-0	-0	-0
71-15	4	M	5.0000	64	128	Y	10	1	0	0	0	0	0	0	-0	-0	-0	-0
71-15	4	M	5.0000	65	129	Y	2	8	0	0	0	0	0	0	-0	-0	-0	-0
71-15	4	M	5.0000	65	130	N	-0	-0	-0	-0	0	0	0	0	-0	-0	-0	-0
71-15	4	M	5.0000	66	131	Y	-0	-0	-0	-0	0	0	0	0	-0	-0	-0	-0
71-15	4	M	5.0000	66	132	Y	6	7	0	0	0	0	0	0	-0	-0	-0	-0
71-15	4	M	5.0000	67	133	Y	8	2	0	0	0	0	0	0	9	2	9	2
71-15	4	M	5.0000	67	134	Y	5	7	0	0	0	0	0	0	5	7	7	8
71-15	4	M	5.0000	68	135	Y	5	7	0	0	0	0	0	0	-0	-0	-0	-0
71-15	4	M	5.0000	68	136	Y	-0	-0	-0	-0	0	0	0	0	-0	-0	-0	-0
71-15	4	M	5.0000	69	137	Y	3	9	0	0	0	0	0	0	3	3	3	4
71-15	4	M	5.0000	69	138	Y	1	1	0	0	0	0	0	0	11	9	9	9
71-15	4	M	5.0000	70	139	Y	-0	-0	-0	-0	0	0	0	0	0	0	0	0
71-15	4	M	5.0000	70	140	Y	-0	-0	-0	-0	0	0	0	0	0	0	0	0

## DOMINANT LETHAL GENE STUDY OF COMPOUND 71-15

1964 APPENDIX

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TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PRFG.	IMPLANTS			EARLY DEATHS			LATE DEATHS			CORPORA		
							L	H	R	L	R	A	L	R	A	L	R	A
CNTRL15	5	S	0.0000	1	1	N	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL15	5	S	0.0000	2	3	Y	3	4	0	0	1	0	0	0	0	0	0	0
CNTRL15	5	S	0.0000	2	4	Y	7	6	1	0	0	0	0	0	0	0	0	0
CNTRL15	5	S	0.0000	3	5	N	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL15	5	S	0.0000	3	6	Y	4	5	0	0	0	0	0	0	0	0	0	0
CNTRL15	5	S	0.0000	4	7	Y	2	6	0	0	0	0	0	0	0	0	0	0
CNTRL15	5	S	0.0000	5	8	Y	5	6	0	0	0	0	0	0	0	0	0	0
CNTRL15	5	S	0.0000	5	9	Y	0	0	0	0	0	0	0	0	0	0	0	0
CNTRL15	5	S	0.0000	10	10	Y	0	1	5	0	0	0	0	0	0	0	0	0
CNTRL15	5	S	0.0000	6	11	Y	2	5	6	0	0	0	0	0	0	0	0	0
CNTRL15	5	S	0.0000	6	12	Y	0	0	0	0	0	0	0	0	0	0	0	0
CNTRL15	5	S	0.0000	7	13	Y	0	0	0	0	0	0	0	0	0	0	0	0
CNTRL15	5	S	0.0000	7	14	Y	0	0	0	0	0	0	0	0	0	0	0	0
CNTRL15	5	S	0.0000	8	15	Y	0	0	0	0	0	0	0	0	0	0	0	0
CNTRL15	5	S	0.0000	8	16	Y	0	0	0	0	0	0	0	0	0	0	0	0
CNTRL15	5	S	0.0000	9	17	Y	0	0	0	0	0	0	0	0	0	0	0	0
CNTRL15	5	S	0.0000	9	18	Y	0	0	0	0	0	0	0	0	0	0	0	0
CNTRL15	5	S	0.0000	10	19	Y	0	0	0	0	0	0	0	0	0	0	0	0
CNTRL15	5	S	0.0000	10	20	Y	0	0	0	0	0	0	0	0	0	0	0	0
71-15	71-15	S	0.300	51	161	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
71-15	71-15	S	0.300	51	102	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
71-15	71-15	S	0.300	52	163	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
71-15	71-15	S	0.300	52	104	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
71-15	71-15	S	0.300	53	165	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
71-15	71-15	S	0.300	53	105	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
71-15	71-15	S	0.300	54	167	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
71-15	71-15	S	0.300	54	107	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
71-15	71-15	S	0.300	54	168	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
71-15	71-15	S	0.300	55	169	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
71-15	71-15	S	0.300	55	117	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
71-15	71-15	S	0.300	56	111	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
71-15	71-15	S	0.300	56	112	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
71-15	71-15	S	0.300	57	113	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
71-15	71-15	S	0.300	57	114	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
71-15	71-15	S	0.300	58	115	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
71-15	71-15	S	0.300	58	116	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
71-15	71-15	S	0.300	59	117	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
71-15	71-15	S	0.300	59	118	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
71-15	71-15	S	0.300	60	119	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
71-15	71-15	S	0.300	60	120	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

## DOMINANT LETHAL STUDY OF COMPOUND 71-15

GUM ARABIC

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TEST MATERIAL	WEEK	S/A	DOSE	MALE NO.	FEMALE NO.	PRFG.	IMPLANTS			DEATHS			LATE DEATHS			COMPOUND LITTER		
							L	R	X	L	R	X	L	R	X	L	R	X
71-15	5	5	2.500	61	121	Y	4	7	0	0	0	0	5	1	6	7		
71-15	5	5	2.500	61	122	Y	4	6	7	0	0	0	4	4	4	4		
71-15	5	5	2.500	62	123	Y	2	4	3	0	0	0	0	0	0	0		
71-15	5	5	2.500	62	124	N	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0		
71-15	5	5	2.500	63	125	Y	4	3	3	0	0	0	10	3	10	3		
71-15	5	5	2.500	63	126	Y	6	6	6	0	0	0	6	6	6	6		
71-15	5	5	2.500	64	127	Y	3	5	5	0	0	0	5	5	5	5		
71-15	5	5	2.500	64	128	Y	-4	-0	-0	-0	-0	-0	-0	-0	-0	-0		
71-15	5	5	2.500	65	129	Y	7	7	7	0	0	0	0	0	0	0		
71-15	5	5	2.500	65	130	Y	6	4	2	1	1	1	4	4	4	4		
71-15	5	5	2.500	66	131	Y	6	6	4	0	0	0	1	1	1	1		
71-15	5	5	2.500	66	132	Y	5	5	5	0	0	0	7	7	7	7		
71-15	5	5	2.500	67	133	Y	7	7	7	0	0	0	9	9	9	9		
71-15	5	5	2.500	67	134	Y	8	8	8	0	0	0	9	9	9	9		
71-15	5	5	2.500	68	135	Y	5	5	5	0	0	0	1	1	1	1		
71-15	5	5	2.500	68	136	Y	8	8	8	0	0	0	5	5	5	5		
71-15	5	5	2.500	69	137	Y	11	11	11	0	0	0	11	11	11	11		
71-15	5	5	2.500	69	138	Y	13	13	13	0	0	0	13	13	13	13		
71-15	5	5	2.500	70	139	Y	8	8	8	0	0	0	9	9	9	9		
71-15	5	5	2.500	70	140	Y	5	5	5	0	0	0	5	5	5	5		
71-15	5	5	2.500	71	141	Y	4	4	4	0	0	0	4	4	4	4		
71-15	5	5	2.500	71	142	Y	7	7	7	0	0	0	7	7	7	7		
71-15	5	5	2.500	72	143	Y	2	2	2	0	0	0	4	4	4	4		
71-15	5	5	2.500	72	144	Y	4	4	4	0	0	0	7	7	7	7		
71-15	5	5	2.500	73	145	Y	6	6	6	0	0	0	8	8	8	8		
71-15	5	5	2.500	73	146	Y	3	3	3	0	0	0	7	7	7	7		
71-15	5	5	2.500	74	147	Y	0	0	0	0	0	0	0	0	0	0		
71-15	5	5	2.500	74	148	Y	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0		
71-15	5	5	2.500	75	149	Y	10	10	10	0	0	0	10	10	10	10		
71-15	5	5	2.500	75	150	Y	8	8	8	0	0	0	9	9	9	9		
71-15	5	5	2.500	76	151	Y	3	3	3	0	0	0	2	2	2	2		
71-15	5	5	2.500	76	152	Y	4	4	4	0	0	0	10	10	10	10		
71-15	5	5	2.500	77	153	Y	5	5	5	0	0	0	1	1	1	1		
71-15	5	5	2.500	77	154	Y	154	154	154	0	0	0	3	3	3	3		
71-15	5	5	2.500	78	155	Y	155	155	155	0	0	0	11	11	11	11		
71-15	5	5	2.500	78	156	Y	156	156	156	0	0	0	4	4	4	4		
71-15	5	5	2.500	79	157	Y	157	157	157	0	0	0	6	6	6	6		
71-15	5	5	2.500	79	158	Y	158	158	158	0	0	0	6	6	6	6		
71-15	5	5	2.500	80	159	Y	159	159	159	0	0	0	7	7	7	7		
71-15	5	5	2.500	80	160	Y	160	160	160	0	0	0	0	0	0	0		

## DOMINANT LETHAL STUDY OF COMPOUND 71-15

PAGE 23

TEST MATERIAL	WEEK	S/H	DOSE	NO.	FEMALE NO.	PRFG.	IMPLANTS			EARLY DEATHS			LATE DEATHS			COMPOUNA LITTER		
							L	R	L	R	L	R	L	R	L	R	L	R
TEM15	5	S	•0.002	11	21	Y	7	3	1	1	0	0	8	3	6	7	-0	-0
TEM15	5	S	•0.002	11	22	N	6	7	0	0	-0	-0	0	0	0	0	0	0
TEM15	5	S	•0.002	12	23	Y	-7	-0	-0	-0	-0	-0	0	0	0	0	0	0
TEM15	5	S	•0.002	12	24	Y	7	7	2	2	0	0	0	0	0	0	0	0
TEM15	5	S	•0.002	13	25	Y	7	6	1	0	0	0	0	0	0	0	0	0
TEM15	5	S	•0.002	13	26	Y	7	7	0	0	0	0	0	0	0	0	0	0
TEM15	5	S	•0.002	14	27	Y	5	5	0	0	0	0	0	0	0	0	0	0
TEM15	5	S	•0.002	14	28	Y	4	4	0	0	0	0	0	0	0	0	0	0
TEM15	5	S	•0.002	15	29	Y	3	3	0	0	0	0	0	0	0	0	0	0
TEM15	5	S	•0.002	15	30	Y	4	4	0	0	0	0	0	0	0	0	0	0
TEM15	5	S	•0.002	16	31	Y	7	4	3	3	0	0	0	0	0	0	0	0
TEM15	5	S	•0.002	16	32	Y	4	7	3	3	0	0	0	0	0	0	0	0
TEM15	5	S	•0.002	17	33	Y	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
TEM15	5	S	•0.002	17	34	Y	3	3	2	3	0	0	0	0	0	0	0	0
TEM15	5	S	•0.002	18	35	Y	2	2	1	1	5	0	0	0	0	0	0	0
TEM15	5	S	•0.002	18	36	Y	7	6	0	0	0	0	0	0	0	0	0	0
TEM15	5	S	•0.002	19	37	Y	3	5	2	2	0	0	0	0	0	0	0	0
TEM15	5	S	•0.002	19	38	Y	7	2	0	0	0	0	0	0	0	0	0	0
TEM15	5	S	•0.002	20	39	Y	4	0	0	0	0	0	0	0	0	0	0	0
TEM15	5	S	•0.002	20	40	Y	0	0	0	0	0	0	0	0	0	0	0	0
CNTRL15	5	M	0.0000	1	1	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y
CNTRL15	5	M	0.0000	1	2	Y	0	0	0	0	0	0	0	0	0	0	0	0
CNTRL15	5	M	0.0000	2	3	Y	3	2	0	0	0	0	0	0	0	0	0	0
CNTRL15	5	M	0.0000	2	4	Y	2	3	0	0	0	0	0	0	0	0	0	0
CNTRL15	5	M	0.0000	3	5	Y	5	5	0	0	0	0	0	0	0	0	0	0
CNTRL15	5	M	0.0000	3	6	Y	0	0	0	0	0	0	0	0	0	0	0	0
CNTRL15	5	M	0.0000	4	7	Y	0	0	0	0	0	0	0	0	0	0	0	0
CNTRL15	5	M	0.0000	4	8	Y	7	5	1	0	0	0	0	0	0	0	0	0
CNTRL15	5	M	0.0000	5	9	Y	12	12	0	0	0	0	0	0	0	0	0	0
CNTRL15	5	M	0.0000	5	10	Y	6	6	0	0	0	0	0	0	0	0	0	0
CNTRL15	5	M	0.0000	6	11	Y	6	6	0	0	0	0	0	0	0	0	0	0
CNTRL15	5	M	0.0000	6	12	Y	5	5	0	0	0	0	0	0	0	0	0	0
CNTRL15	5	M	0.0000	7	13	Y	0	0	0	0	0	0	0	0	0	0	0	0
CNTRL15	5	M	0.0000	7	14	Y	9	7	1	0	0	0	0	0	0	0	0	0
CNTRL15	5	M	0.0000	8	15	Y	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL15	5	M	0.0000	8	16	Y	9	3	1	0	0	0	0	0	0	0	0	0
CNTRL15	5	M	0.0000	9	17	Y	0	0	0	0	0	0	0	0	0	0	0	0
CNTRL15	5	M	0.0000	9	18	Y	4	6	0	0	0	0	0	0	0	0	0	0
CNTRL15	5	M	0.0000	10	19	Y	6	4	0	0	0	0	0	0	0	0	0	0
CNTRL15	5	M	0.0000	10	20	Y	6	6	0	0	0	0	0	0	0	0	0	0

## DOMINANT LETHAL GENE STUDY OF COMPOUND 71-15

PAGE -24

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS			EARLY DEATHS			LATE DEATHS			COMPOUND LUTEA		
							L	R	L	R	L	R	L	R	L	R	L	R
71-15	5	M	•0300	41	81	Y	5	6	0	0	0	0	0	0	0	0	0	0
71-15	5	M	•0300	41	82	Y	5	6	1	0	0	0	0	0	0	0	0	0
71-15	5	M	•0300	42	83	Y	6	8	0	0	0	0	0	0	0	0	0	0
71-15	5	M	•0300	42	84	Y	3	10	0	2	0	0	0	0	0	0	0	0
71-15	5	M	•0300	43	85	Y	3	7	0	0	0	0	0	0	0	0	0	0
71-15	5	M	•0300	43	86	Y	5	6	2	0	0	0	0	0	0	0	0	0
71-15	5	M	•0300	44	87	N	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
71-15	5	M	•0300	44	88	Y	2	2	0	0	0	0	0	0	0	0	0	0
71-15	5	M	•0300	45	89	Y	8	5	0	0	0	0	0	0	0	0	0	0
71-15	5	M	•0300	45	90	Y	5	7	1	0	0	0	0	0	0	0	0	0
71-15	5	M	•0300	46	91	N	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
71-15	5	M	•0300	46	92	Y	5	11	0	1	0	0	0	0	0	0	0	0
71-15	5	M	•0300	47	93	Y	3	7	0	0	0	0	0	0	0	0	0	0
71-15	5	M	•0300	47	94	Y	4	7	0	0	0	0	0	0	0	0	0	0
71-15	5	M	•0300	48	95	Y	7	9	0	2	0	0	0	0	0	0	0	0
71-15	5	M	•0300	49	96	Y	2	11	0	0	0	0	0	0	0	0	0	0
71-15	5	M	•0300	49	97	Y	5	4	0	0	0	0	0	0	0	0	0	0
71-15	5	M	•0300	49	98	Y	4	7	0	0	0	0	0	0	0	0	0	0
71-15	5	M	•0300	50	99	Y	8	5	0	0	0	0	0	0	0	0	0	0
71-15	5	M	•0300	50	100	Y	4	7	0	0	0	0	0	0	0	0	0	0
71-15	5	M	2.5000	51	101	Y	4	6	0	0	0	0	0	0	0	0	0	0
71-15	5	M	2.5000	51	102	Y	7	3	0	0	0	0	0	0	0	0	0	0
71-15	5	M	2.5000	52	103	Y	9	8	7	7	0	0	0	0	0	0	0	0
71-15	5	M	2.5000	52	104	Y	7	7	0	0	0	0	0	0	0	0	0	0
71-15	5	M	2.5000	53	105	Y	6	6	0	0	0	0	0	0	0	0	0	0
71-15	5	M	2.5000	53	106	Y	4	7	0	0	0	0	0	0	0	0	0	0
71-15	5	M	2.5000	54	107	Y	4	7	0	0	0	0	0	0	0	0	0	0
71-15	5	M	2.5000	54	108	Y	4	6	0	0	0	0	0	0	0	0	0	0
71-15	5	M	2.5000	55	109	Y	4	7	0	0	0	0	0	0	0	0	0	0
71-15	5	M	2.5000	55	110	Y	0	2	0	0	0	0	0	0	0	0	0	0
71-15	5	M	2.5000	56	111	Y	4	9	0	0	0	0	0	0	0	0	0	0
71-15	5	M	2.5000	56	112	Y	7	8	0	0	0	0	0	0	0	0	0	0
71-15	5	M	2.5000	57	113	Y	5	6	0	1	0	0	0	0	0	0	0	0
71-15	5	M	2.5000	57	114	Y	7	4	0	0	0	0	0	0	0	0	0	0
71-15	5	M	2.5000	58	115	Y	5	7	0	0	0	0	0	0	0	0	0	0
71-15	5	M	2.5000	58	116	Y	4	10	0	0	0	0	0	0	0	0	0	0
71-15	5	M	2.5000	59	117	Y	5	7	0	0	0	0	0	0	0	0	0	0
71-15	5	M	2.5000	59	118	Y	2	10	0	0	0	0	0	0	0	0	0	0
71-15	5	M	2.5000	60	119	Y	7	3	0	0	0	0	0	0	0	0	0	0
71-15	5	M	2.5000	60	120	Y	7	5	0	0	0	0	0	0	0	0	0	0

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## DOMINANT LETHAL GENE STUDY OF COMPOUND 71-15

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TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS			EARLY DEATHS			LATE DEATHS			CORPORA LUTEA		
							L	R	H	L	R	H	L	R	H	L	R	H
71-15	5	M	5.0000	61	121	Y	6	8	0	1	0	4	6	8	0	1	7	4
71-15	5	M	5.0000	61	122	Y	7	4	0	0	0	0	5	6	0	0	6	9
71-15	5	M	5.0000	62	123	Y	6	6	0	0	0	0	2	0	0	0	0	0
71-15	5	M	5.0000	62	124	Y	2	9	0	0	0	0	0	0	0	0	0	4
71-15	5	M	5.0000	63	125	Y	5	4	0	0	0	0	5	4	0	0	0	9
71-15	5	M	5.0000	63	126	Y	5	9	0	0	0	0	5	9	0	0	0	5
71-15	5	M	5.0000	64	127	Y	7	5	0	0	0	0	7	5	0	0	0	7
71-15	5	M	5.0000	64	128	Y	5	7	0	0	0	0	5	7	0	0	0	7
71-15	5	M	5.0000	65	129	Y	8	2	0	1	0	0	0	0	0	0	0	3
71-15	5	M	5.0000	65	130	Y	4	0	0	0	0	0	0	0	0	0	0	5
71-15	5	M	5.0000	66	131	N	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0
71-15	5	M	5.0000	66	132	Y	5	6	0	0	0	0	0	0	0	0	0	7
71-15	5	M	5.0000	67	133	Y	5	3	1	0	0	0	0	0	0	0	0	9
71-15	5	M	5.0000	67	134	Y	6	5	0	0	0	0	0	0	0	0	0	5
71-15	5	M	5.0000	68	135	Y	7	5	0	0	0	0	0	0	0	0	0	7
71-15	5	M	5.0000	68	136	Y	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	
71-15	5	M	5.0000	69	137	Y	2	3	1	1	0	0	0	0	0	0	0	
71-15	5	M	5.0000	69	138	Y	5	8	0	0	0	0	0	0	0	0	0	
71-15	5	M	5.0000	70	139	Y	6	3	0	0	0	0	0	0	0	0	0	
71-15	5	M	5.0000	70	140	Y	5	6	0	0	0	0	0	0	0	0	0	

## DOMINANT LETHAL GENE STUDY OF COMPOUND 71-15

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TEST MATERIAL	WEEK	S/M	DOSE	FEMALE NO.	PREG.	IMPLANTS	L	R	EARLY DEATHS	L	R	LATE DEATHS	L	R	CORPORA LUTIFIA	L	R
							N	N	N	N	N	N	N	N	N	N	N
CNTL15	6	S	0.0000	1	1	1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTL15	6	S	0.0000	2	3	7	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTL15	6	S	0.0000	2	4	4	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTL15	6	S	0.0000	3	5	5	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTL15	6	S	0.0000	3	6	6	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTL15	6	S	0.0000	4	7	7	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTL15	6	S	0.0000	4	8	7	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTL15	6	S	0.0000	5	9	9	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTL15	6	S	0.0000	5	10	10	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTL15	6	S	0.0000	6	11	11	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTL15	6	S	0.0000	6	12	12	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTL15	6	S	0.0000	7	13	13	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTL15	6	S	0.0000	7	14	14	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTL15	6	S	0.0000	8	15	15	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTL15	6	S	0.0000	9	16	16	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTL15	6	S	0.0000	9	17	17	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTL15	6	S	0.0000	9	18	18	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTL15	6	S	0.0000	10	19	19	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CNTL15	6	S	0.0000	10	20	20	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
71-15	6	S	0.0000	51	101	101	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
71-15	6	S	0.0000	51	102	102	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
71-15	6	S	0.0000	52	103	103	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
71-15	6	S	0.0000	52	104	104	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
71-15	6	S	0.0000	53	105	105	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
71-15	6	S	0.0000	53	106	106	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
71-15	6	S	0.0000	54	107	107	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
71-15	6	S	0.0000	54	108	108	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
71-15	6	S	0.0000	55	109	109	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
71-15	6	S	0.0000	55	110	110	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
71-15	6	S	0.0000	56	111	111	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
71-15	6	S	0.0000	56	112	112	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
71-15	6	S	0.0000	57	113	113	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
71-15	6	S	0.0000	57	114	114	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
71-15	6	S	0.0000	58	115	115	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
71-15	6	S	0.0000	58	116	116	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
71-15	6	S	0.0000	59	117	117	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
71-15	6	S	0.0000	60	118	118	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
71-15	6	S	0.0000	60	119	119	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
71-15	6	S	0.0000	60	120	120	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0

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## DOMINANT LETHAL GENE STUDY OF COMPOUND 71-15

PAGE 27

## GUM ARABIC

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS	DEATHS	EARLY			LATE			COMPARA		
									L	H	P	L	H	P	L	H	P
71-15	6	S	2.500	61	121	Y	4	0	0	0	0	0	0	0	0	0	0
71-15	6	S	2.500	61	122	Y	5	4	0	0	0	0	0	0	0	0	0
71-15	6	S	2.500	62	123	Y	7	6	0	0	0	0	0	0	0	0	0
71-15	6	S	2.500	62	124	Y	2	7	1	0	0	0	0	0	0	0	0
71-15	6	S	2.500	63	125	Y	7	7	0	0	0	0	0	0	0	0	0
71-15	6	S	2.500	63	126	Y	N	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
71-15	6	S	2.500	64	127	Y	7	6	1	0	0	0	0	0	0	0	0
71-15	6	S	2.500	64	128	Y	5	5	1	0	0	0	0	0	0	0	0
71-15	6	S	2.500	65	129	Y	7	4	1	0	0	0	0	0	0	0	0
71-15	6	S	2.500	65	130	Y	7	4	1	0	0	0	0	0	0	0	0
71-15	6	S	2.500	66	131	N	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
71-15	6	S	2.500	66	132	Y	6	6	0	0	0	0	0	0	0	0	0
71-15	6	S	2.500	67	133	Y	5	5	0	0	0	0	0	0	0	0	0
71-15	6	S	2.500	67	134	Y	5	5	0	0	0	0	0	0	0	0	0
71-15	6	S	2.500	68	135	Y	6	6	0	0	0	0	0	0	0	0	0
71-15	6	S	2.500	68	136	Y	6	6	0	0	0	0	0	0	0	0	0
71-15	6	S	2.500	69	137	Y	5	5	0	0	0	0	0	0	0	0	0
71-15	6	S	2.500	69	138	Y	5	5	1	0	0	0	0	0	0	0	0
71-15	6	S	2.500	70	139	Y	4	4	1	0	0	0	0	0	0	0	0
71-15	6	S	2.500	70	140	Y	4	4	1	1	1	1	1	1	1	1	1
71-15	6	S	2.500	71	141	Y	5	6	3	3	3	3	3	3	3	3	3
71-15	6	S	2.500	71	142	Y	5	6	3	3	3	3	3	3	3	3	3
71-15	6	S	2.500	72	143	Y	5	6	3	3	3	3	3	3	3	3	3
71-15	6	S	2.500	72	144	Y	5	6	3	3	3	3	3	3	3	3	3
71-15	6	S	2.500	73	145	Y	5	6	3	3	3	3	3	3	3	3	3
71-15	6	S	2.500	73	146	Y	5	6	3	3	3	3	3	3	3	3	3
71-15	6	S	2.500	74	147	Y	5	6	3	3	3	3	3	3	3	3	3
71-15	6	S	2.500	74	148	Y	5	6	3	3	3	3	3	3	3	3	3
71-15	6	S	2.500	75	149	Y	5	6	3	3	3	3	3	3	3	3	3
71-15	6	S	2.500	75	150	Y	5	6	3	3	3	3	3	3	3	3	3
71-15	6	S	2.500	76	151	Y	5	6	3	3	3	3	3	3	3	3	3
71-15	6	S	2.500	76	152	Y	5	6	3	3	3	3	3	3	3	3	3
71-15	6	S	2.500	77	153	Y	5	6	3	3	3	3	3	3	3	3	3
71-15	6	S	2.500	77	154	Y	5	6	3	3	3	3	3	3	3	3	3
71-15	6	S	2.500	78	155	Y	5	6	3	3	3	3	3	3	3	3	3
71-15	6	S	2.500	79	156	Y	5	6	3	3	3	3	3	3	3	3	3
71-15	6	S	2.500	79	157	Y	5	6	3	3	3	3	3	3	3	3	3
71-15	6	S	2.500	80	158	Y	5	6	3	3	3	3	3	3	3	3	3
71-15	6	S	2.500	80	159	Y	5	6	3	3	3	3	3	3	3	3	3
71-15	6	S	2.500	81	160	Y	5	6	3	3	3	3	3	3	3	3	3

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## DOMINANT LETHAL GENE STUDY OF COMPOUND 71-15

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TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	F/F MALE NO.	PRFG.	IMPLANTS	EARLY DEATHS	LATE DEATHS	LITTERS	GUM ANALYSIS	
								L	R	L	L	R
TFM15	6	S	0.0002	11	21	Y	Y	7	7	7	7	7
TFM15	6	S	0.0002	11	22	Y	Y	7	7	7	7	7
TFM15	6	S	0.0002	12	23	Y	Y	7	7	7	7	7
TFM15	6	S	0.0002	12	24	Y	Y	7	7	7	7	7
TFM15	6	S	0.0002	13	25	Y	Y	7	7	7	7	7
TFM15	6	S	0.0002	13	26	Y	Y	7	7	7	7	7
TFM15	6	S	0.0002	14	27	Y	Y	7	7	7	7	7
TFM15	6	S	0.0002	14	28	Y	Y	7	7	7	7	7
TFM15	6	S	0.0002	15	29	Y	Y	7	7	7	7	7
TFM15	6	S	0.0002	15	30	Y	Y	7	7	7	7	7
TFM15	6	S	0.0002	16	31	Y	Y	7	7	7	7	7
TFM15	6	S	0.0002	16	32	Y	Y	7	7	7	7	7
TFM15	6	S	0.0002	17	33	Y	Y	7	7	7	7	7
TFM15	6	S	0.0002	17	34	Y	Y	7	7	7	7	7
TFM15	6	S	0.0002	18	35	Y	Y	7	7	7	7	7
TFM15	6	S	0.0002	18	36	Y	Y	7	7	7	7	7
TFM15	6	S	0.0002	19	37	Y	Y	7	7	7	7	7
TFM15	6	S	0.0002	19	38	Y	Y	7	7	7	7	7
TFM15	6	S	0.0002	20	39	Y	Y	7	7	7	7	7
TFM15	6	S	0.0002	20	40	Y	Y	7	7	7	7	7
CNTPL15	6	S	0.0000	1	2	Y	Y	7	7	7	7	7
CNTPL15	6	S	0.0000	1	3	Y	Y	7	7	7	7	7
CNTPL15	6	S	0.0000	2	4	Y	Y	7	7	7	7	7
CNTPL15	6	S	0.0000	3	5	Y	Y	7	7	7	7	7
CNTPL15	6	S	0.0000	4	6	Y	Y	7	7	7	7	7
CNTPL15	6	S	0.0000	4	7	Y	Y	7	7	7	7	7
CNTPL15	6	S	0.0000	5	8	Y	Y	7	7	7	7	7
CNTPL15	6	S	0.0000	5	9	Y	Y	7	7	7	7	7
CNTPL15	6	S	0.0000	6	10	Y	Y	7	7	7	7	7
CNTPL15	6	S	0.0000	6	11	Y	Y	7	7	7	7	7
CNTPL15	6	S	0.0000	6	12	Y	Y	7	7	7	7	7
CNTPL15	6	S	0.0000	7	13	Y	Y	7	7	7	7	7
CNTPL15	6	S	0.0000	7	14	Y	Y	7	7	7	7	7
CNTPL15	6	S	0.0000	8	15	Y	Y	7	7	7	7	7
CNTPL15	6	S	0.0000	9	16	Y	Y	7	7	7	7	7
CNTPL15	6	S	0.0000	9	17	Y	Y	7	7	7	7	7
CNTPL15	6	S	0.0000	10	18	Y	Y	7	7	7	7	7
CNTPL15	6	S	0.0000	10	19	Y	Y	7	7	7	7	7
CNTPL15	6	S	0.0000	10	20	Y	Y	7	7	7	7	7

## DOMINANT LETHAL GENE STUDY OF COMPOUND. 71-15

PAGE 29

UJM ARAMIC

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS	DEATHS	LATENT	CORPORA	LITTER	
											L	R
71-15	6	M	0.0300	41	81	Y	7	4	0	0	5	4
71-15	6	M	0.0300	41	82	Y	8	1	0	0	13	2
71-15	6	M	0.0300	42	83	Y	10	2	0	0	10	4
71-15	6	M	0.0300	42	84	Y	7	4	0	0	7	4
71-15	6	M	0.0300	43	85	Y	7	7	0	0	4	7
71-15	6	M	0.0300	43	86	Y	7	7	0	0	7	7
71-15	6	M	0.0300	44	87	Y	7	4	0	0	0	0
71-15	6	M	0.0300	44	88	Y	-0	-9	-0	-0	-0	-0
71-15	6	M	0.0300	45	89	Y	5	7	0	0	1	1
71-15	6	M	0.0300	45	90	Y	3	10	0	0	3	10
71-15	6	M	0.0300	46	91	Y	6	4	0	0	4	4
71-15	6	M	0.0300	46	92	Y	8	3	10	0	0	0
71-15	6	M	0.0300	47	93	Y	4	3	0	0	2	10
71-15	6	M	0.0300	47	94	Y	10	0	0	0	0	0
71-15	6	M	0.0300	48	95	Y	5	7	0	0	0	0
71-15	6	M	0.0300	48	96	Y	7	7	0	0	0	0
71-15	6	M	0.0300	49	97	Y	6	1	0	0	0	0
71-15	6	M	0.0300	49	98	Y	6	4	0	0	0	0
71-15	6	M	0.0300	50	99	Y	5	7	0	0	0	0
71-15	6	M	0.0300	50	100	Y	7	7	0	0	0	0
71-15	6	M	0.0300	51	101	Y	8	5	0	0	0	0
71-15	6	M	0.0300	51	102	Y	6	5	0	0	0	0
71-15	6	M	0.0300	52	103	Y	6	6	0	0	0	0
71-15	6	M	0.0300	52	104	Y	6	6	0	0	0	0
71-15	6	M	0.0300	53	105	Y	6	5	0	0	0	0
71-15	6	M	0.0300	53	106	Y	6	5	0	0	0	0
71-15	6	M	0.0300	54	107	Y	12	0	0	0	2	13
71-15	6	M	0.0300	54	108	Y	6	6	0	0	0	0
71-15	6	M	0.0300	55	109	Y	12	7	0	0	0	0
71-15	6	M	0.0300	55	110	Y	6	7	0	0	0	0
71-15	6	M	0.0300	56	111	Y	6	7	0	0	0	0
71-15	6	M	0.0300	56	112	Y	7	5	0	0	0	0
71-15	6	M	0.0300	57	113	Y	7	4	0	0	0	0
71-15	6	M	0.0300	57	114	Y	7	4	0	0	0	0
71-15	6	M	0.0300	58	115	Y	7	4	0	0	0	0
71-15	6	M	0.0300	58	116	Y	7	4	0	0	0	0
71-15	6	M	0.0300	59	117	Y	7	4	0	0	0	0
71-15	6	M	0.0300	59	118	Y	7	4	0	0	0	0
71-15	6	M	0.0300	60	119	Y	7	4	0	0	0	0
71-15	6	M	0.0300	60	120	Y	7	4	0	0	0	0

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## DOMINANT LETHAL GENE STUDY OF COMPOUND 71-15

PAGE 30 GUM ARABIC

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS			EARLY DEATHS			LATE DEATHS			CORPORA LUTEA		
							L	R	L	R	L	R	L	R	L	R	L	R
71-15	6	M	5.0600	61	121	Y	4	7	6	6	0	0	1	3	4	7	6	
71-15	6	M	5.0700	61	122		-0	-0	-0	-0	0	0	0	0	-0	-0	5	
71-15	6	M	5.0700	62	123		8	5	0	0	0	0	0	0	5	12		
71-15	6	M	5.0800	62	124		5	10	0	0	0	0	0	0	-0	-0		
71-15	6	M	5.0700	63	125		-0	-0	-0	-0	0	0	0	0	-0	-0		
71-15	6	M	5.0700	63	126		-0	-0	-0	-0	0	0	0	0	-0	-0		
71-15	6	M	5.0700	64	127		-0	-0	-0	-0	0	0	0	0	-0	-0		
71-15	6	M	5.0700	64	128		-4	9	0	0	0	0	0	0	4	9		
71-15	6	M	5.0700	65	129		7	7	0	0	0	0	0	0	7	7		
71-15	6	M	5.0700	65	130		-0	-0	-0	-0	0	0	0	0	-0	-0		
71-15	6	M	5.0700	66	131		-6	6	0	0	0	0	0	0	6	6		
71-15	6	M	5.0700	66	132		5	7	0	0	0	0	0	0	5	7		
71-15	6	M	5.0700	67	133		-0	-0	-0	-0	0	0	0	0	-0	-0		
71-15	6	M	5.0700	67	134		2	2	0	0	0	0	0	0	2	2		
71-15	6	M	5.0700	68	135		5	8	0	0	0	0	0	0	8	5		
71-15	6	M	5.0700	68	136		-0	-0	-0	-0	0	0	0	0	-0	-0		
71-15	6	M	5.0700	69	137		5	8	0	0	0	0	0	0	5	8		
71-15	6	M	5.0700	69	138		-0	-0	-0	-0	0	0	0	0	-0	-0		
71-15	6	M	5.0700	70	139		7	5	0	0	0	0	0	0	3	7		
71-15	6	M	5.0700	70	140													

## DOMINANT LETHAL GENE STUDY OF COMPOUND 71-15

## PAGE 31 GUM ARABIC

TEST MATERIAL	WEEK	S/M	UNSP.	MALE NO.	FEMALE NO.	PRFG.	IMPLANTS			EARLY DEATHS.	LATE DEATHS.	CORPORA LUTEA
							L	R	B			
CNTAL15	7	S	0.0000	1	1	Y	5	6	0	0	0	5 5
CNTAL15	7	S	0.0000	1	2	Y	5	6	0	0	0	5 6
CNTQ15	7	S	0.0000	2	3	Y	5	6	0	0	0	H 6
CNTAL15	7	S	0.0000	2	4	N	5	6	-0	-0	-0	-0
CNTAL15	7	S	0.0000	3	5	Y	5	6	0	0	0	6 4
CNTAL15	7	S	0.0000	3	6	Y	5	6	0	0	0	5 9
CNTAL15	7	S	0.0000	4	7	N	5	6	-0	-0	-0	-0
CNTAL15	7	S	0.0000	4	8	Y	5	6	-0	-0	-0	-0
CNTAL15	7	S	0.0000	5	9	Y	5	6	-0	-0	-0	-0
CNTAL15	7	S	0.0000	5	10	Y	5	6	-0	-0	-0	-0
CNTAL15	7	S	0.0000	6	11	Y	5	6	-0	-0	-0	-0
CNTAL15	7	S	0.0000	6	12	Y	5	6	-0	-0	-0	-0
CNTAL15	7	S	0.0000	7	13	Y	5	6	-0	-0	-0	-0
CNTAL15	7	S	0.0000	7	14	Y	5	6	-0	-0	-0	-0
CNTAL15	7	S	0.0000	8	15	N	5	6	-0	-0	-0	-0
CNTAL15	7	S	0.0000	8	16	Y	5	6	-0	-0	-0	-0
CNTAL15	7	S	0.0000	9	17	Y	5	6	-0	-0	-0	-0
CNTAL15	7	S	0.0000	9	18	Y	5	6	-0	-0	-0	-0
CNTAL15	7	S	0.0000	10	19	Y	5	6	-0	-0	-0	-0
CNTAL15	7	S	0.0000	10	20	Y	5	6	-0	-0	-0	-0
71-15	7	S	0.0300	51	101	Y	5	6	-0	-0	-0	-0
71-15	7	S	0.0300	51	102	Y	5	6	-0	-0	-0	-0
71-15	7	S	0.0300	52	103	Y	5	6	-0	-0	-0	-0
71-15	7	S	0.0300	52	104	Y	5	6	-0	-0	-0	-0
71-15	7	S	0.0300	53	105	Y	5	6	-0	-0	-0	-0
71-15	7	S	0.0300	53	106	Y	5	6	-0	-0	-0	-0
71-15	7	S	0.0300	54	107	Y	5	6	-0	-0	-0	-0
71-15	7	S	0.0300	54	108	Y	5	6	-0	-0	-0	-0
71-15	7	S	0.0300	55	109	Y	5	6	-0	-0	-0	-0
71-15	7	S	0.0300	55	110	Y	5	6	-0	-0	-0	-0
71-15	7	S	0.0300	56	111	Y	5	6	-0	-0	-0	-0
71-15	7	S	0.0300	56	112	Y	5	6	-0	-0	-0	-0
71-15	7	S	0.0300	57	113	Y	5	6	-0	-0	-0	-0
71-15	7	S	0.0300	57	114	Y	5	6	-0	-0	-0	-0
71-15	7	S	0.0300	58	115	Y	5	6	-0	-0	-0	-0
71-15	7	S	0.0300	58	116	Y	5	6	-0	-0	-0	-0
71-15	7	S	0.0300	59	117	Y	5	6	-0	-0	-0	-0
71-15	7	S	0.0300	59	118	Y	5	6	-0	-0	-0	-0
71-15	7	S	0.0300	60	119	Y	5	6	-0	-0	-0	-0
71-15	7	S	0.0300	60	120	Y	5	6	-0	-0	-0	-0

## DOMINANT LETHAL GENE STUDY OF COMPOUND 71-15, GUM APATIC

PAGE 32

TEST MATERIAL	WEEK	S/M	DOSF	MALE NO.	FEMALE NO.	PREG.	IMPLANTS	EARLY DEATHS			LATE DEATHS			COMPOUND		
								L	R	a	L	R	a	L	R	a
71-15	-	7	6	2.5000	61	121		2	2	2	3	3	3	3	3	3
71-15	7	5	2.5000	51	122		0	0	0	0	0	0	0	0	0	0
71-15	7	5	2.5000	62	123		0	0	0	0	0	0	0	0	0	0
71-15	7	5	2.5000	62	124		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
71-15	7	5	2.5000	63	125		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
71-15	7	5	2.5000	63	126		1	0	0	0	0	0	0	0	0	0
71-15	7	5	2.5000	64	127		6	6	6	6	6	6	6	6	6	6
71-15	7	5	2.5000	64	128		3	3	3	3	3	3	3	3	3	3
71-15	7	5	2.5000	65	129		10	10	10	10	10	10	10	10	10	10
71-15	7	5	2.5000	65	130		15	15	15	15	15	15	15	15	15	15
71-15	7	5	2.5000	66	131		0	0	0	0	0	0	0	0	0	0
71-15	7	5	2.5000	66	132		0	0	0	0	0	0	0	0	0	0
71-15	7	5	2.5000	67	133		0	0	0	0	0	0	0	0	0	0
71-15	7	5	2.5000	67	134		0	0	0	0	0	0	0	0	0	0
71-15	7	5	2.5000	68	135		0	0	0	0	0	0	0	0	0	0
71-15	7	5	2.5000	68	136		0	0	0	0	0	0	0	0	0	0
71-15	7	5	2.5000	69	137		0	0	0	0	0	0	0	0	0	0
71-15	7	5	2.5000	69	138		0	0	0	0	0	0	0	0	0	0
71-15	7	5	2.5000	70	139		0	0	0	0	0	0	0	0	0	0
71-15	7	5	2.5000	70	140		0	0	0	0	0	0	0	0	0	0
71-15	7	5	2.5000	71	141		8	8	8	8	8	8	8	8	8	8
71-15	7	5	2.5000	71	142		0	0	0	0	0	0	0	0	0	0
71-15	7	5	2.5000	72	143		0	0	0	0	0	0	0	0	0	0
71-15	7	5	2.5000	72	144		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
71-15	7	5	2.5000	73	145		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
71-15	7	5	2.5000	73	146		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
71-15	7	5	2.5000	74	147		10	10	10	10	10	10	10	10	10	10
71-15	7	5	2.5000	74	148		0	0	0	0	0	0	0	0	0	0
71-15	7	5	2.5000	75	149		0	0	0	0	0	0	0	0	0	0
71-15	7	5	2.5000	75	150		0	0	0	0	0	0	0	0	0	0
71-15	7	5	2.5000	76	151		0	0	0	0	0	0	0	0	0	0
71-15	7	5	2.5000	76	152		0	0	0	0	0	0	0	0	0	0
71-15	7	5	2.5000	77	153		0	0	0	0	0	0	0	0	0	0
71-15	7	5	2.5000	77	154		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
71-15	7	5	2.5000	78	155		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
71-15	7	5	2.5000	78	156		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
71-15	7	5	2.5000	79	157		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
71-15	7	5	2.5000	79	158		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
71-15	7	5	2.5000	80	159		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
71-15	7	5	2.5000	80	160		-0	-0	-0	-0	-0	-0	-0	-0	-0	-0

## DOMINANT LETHAL GENE STUDY OF COMPOUND 11-15

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GUM BASIC

TEST MATERIAL	WEEK	SEX	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS			EARLY DEATHS			LATE DEATHS			CORPORA LUTEA		
							L	R	A	L	R	A	L	R	A	L	R	A
TEM15	7	S	•0.002	11	21	Y	1	2	0	0	0	0	0	0	0	7	6	6
TEM15	7	S	•0.002	11	22	Y	1	6	0	0	0	0	0	0	0	1	4	3
TEM15	7	S	•0.002	12	23	Y	1	6	0	0	0	0	0	0	0	1	4	5
TEM15	7	S	•0.002	12	24	Y	1	6	0	0	0	0	0	0	0	1	4	3
TEM15	7	S	•0.002	13	25	Y	1	6	0	0	0	0	0	0	0	1	4	10
TEM15	7	S	•0.002	13	26	Y	1	6	0	0	0	0	0	0	0	1	4	4
TEM15	7	S	•0.002	14	27	Y	1	6	0	0	0	0	0	0	0	0	0	0
TEM15	7	S	•0.002	14	28	Y	1	6	0	0	0	0	0	0	0	0	0	0
TEM15	7	S	•0.002	15	29	Y	1	6	0	0	0	0	0	0	0	0	0	0
TEM15	7	S	•0.002	15	30	Y	1	6	0	0	0	0	0	0	0	0	0	0
TEM15	7	S	•0.002	16	31	Y	1	6	0	0	0	0	0	0	0	0	0	0
TEM15	7	S	•0.002	16	32	Y	1	6	0	0	0	0	0	0	0	0	0	0
TEM15	7	S	•0.002	17	33	Y	1	6	0	0	0	0	0	0	0	0	0	0
TEM15	7	S	•0.002	17	34	Y	1	6	0	0	0	0	0	0	0	0	0	0
TEM15	7	S	•0.002	18	35	Y	1	6	0	0	0	0	0	0	0	0	0	0
TEM15	7	S	•0.002	18	36	Y	1	6	0	0	0	0	0	0	0	0	0	0
TEM15	7	S	•0.002	19	37	Y	1	6	0	0	0	0	0	0	0	0	0	0
TEM15	7	S	•0.002	19	38	Y	1	6	0	0	0	0	0	0	0	0	0	0
TEM15	7	S	•0.002	20	39	Y	1	6	0	0	0	0	0	0	0	0	0	0
TEM15	7	S	•0.002	20	40	Y	1	6	0	0	0	0	0	0	0	0	0	0
CNTPL15	7	M	0.000	1	1	Y	1	2	3	4	5	6	7	8	9	10	11	12
CNTPL15	7	M	0.000	1	2	Y	1	2	3	4	5	6	7	8	9	10	11	12
CNTPL15	7	M	0.000	2	3	Y	1	2	3	4	5	6	7	8	9	10	11	12
CNTPL15	7	M	0.000	3	4	Y	1	2	3	4	5	6	7	8	9	10	11	12
CNTPL15	7	M	0.000	3	5	Y	1	2	3	4	5	6	7	8	9	10	11	12
CNTPL15	7	M	0.000	4	7	Y	1	2	3	4	5	6	7	8	9	10	11	12
CNTPL15	7	M	0.000	4	7	Y	1	2	3	4	5	6	7	8	9	10	11	12
CNTPL15	7	M	0.000	5	10	Y	1	2	3	4	5	6	7	8	9	10	11	12
CNTPL15	7	M	0.000	6	11	Y	1	2	3	4	5	6	7	8	9	10	11	12
CNTPL15	7	M	0.000	6	12	Y	1	2	3	4	5	6	7	8	9	10	11	12
CNTPL15	7	M	0.000	7	13	Y	1	2	3	4	5	6	7	8	9	10	11	12
CNTPL15	7	M	0.000	7	14	Y	1	2	3	4	5	6	7	8	9	10	11	12
CNTPL15	7	M	0.000	8	15	Y	1	2	3	4	5	6	7	8	9	10	11	12
CNTPL15	7	M	0.000	8	16	Y	1	2	3	4	5	6	7	8	9	10	11	12
CNTPL15	7	M	0.000	9	17	Y	1	2	3	4	5	6	7	8	9	10	11	12
CNTPL15	7	M	0.000	9	18	Y	1	2	3	4	5	6	7	8	9	10	11	12
CNTPL15	7	M	0.000	10	19	Y	1	2	3	4	5	6	7	8	9	10	11	12
CNTPL15	7	M	0.000	10	20	Y	1	2	3	4	5	6	7	8	9	10	11	12

## DOMINANT LETHAL GENE STUDY OF COMPOUND 71-15.

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GLD ARABIC

TEST MATERIAL	WEEK.	S/4	DOSF	MALE NO.	FEMALE NO.	PREG.	IMPLANTS	EARLY DEATHS	LATE DEATHS	COMPONA LUTEA
71-15-	7	9	•0300	41	81	Y	7	0	0	10
71-15	7	9	•0300	41	82	Y	10	0	10	6
71-15	7	9	•0300	42	83	Y	5	7	5	7
71-15	7	9	•0300	42	84	Y	4	6	4	4
71-15	7	9	•0300	43	85	Y	7	0	7	7
71-15	7	9	•0310	43	86	Y	7	0	6	5
71-15	7	9	•0310	44	87	Y	7	5	0	5
71-15	7	9	•0310	44	88	Y	7	0	7	6
71-15	7	9	•0310	45	89	Y	2	0	4	11
71-15	7	9	•0300	45	90	Y	0	0	6	8
71-15	7	9	•0300	45	91	Y	0	0	6	6
71-15	7	9	•0300	46	92	Y	7	0	10	5
71-15	7	9	•0300	46	93	Y	4	0	4	6
71-15	7	9	•0300	47	94	Y	7	0	7	6
71-15	7	9	•0300	47	95	Y	7	0	4	7
71-15	7	9	•0300	48	96	Y	6	0	6	6
71-15	7	9	•0300	48	97	N	0	0	-0	-0
71-15	7	9	•0300	49	98	Y	7	0	0	8
71-15	7	9	•0300	49	99	Y	7	0	0	4
71-15	7	9	•0300	50	100	Y	2	0	4	7
71-15	7	9	•0300	50	101	Y	0	0	3	2
71-15	7	9	•0300	50	102	Y	0	0	0	0
71-15	7	9	•0300	51	103	Y	0	0	0	0
71-15	7	9	•0300	51	104	Y	0	0	0	0
71-15	7	9	•0300	52	105	Y	0	0	0	0
71-15	7	9	•0300	52	106	Y	0	0	0	0
71-15	7	9	•0300	53	107	Y	0	0	0	0
71-15	7	9	•0300	53	108	Y	0	0	0	0
71-15	7	9	•0300	54	109	Y	0	0	0	0
71-15	7	9	•0300	54	110	Y	0	0	0	0
71-15	7	9	•0300	55	111	Y	0	0	0	0
71-15	7	9	•0300	55	112	Y	0	0	0	0
71-15	7	9	•0300	56	113	Y	0	0	0	0
71-15	7	9	•0300	56	114	Y	0	0	0	0
71-15	7	9	•0300	57	115	Y	0	0	0	0
71-15	7	9	•0300	57	116	Y	0	0	0	0
71-15	7	9	•0300	58	117	Y	0	0	0	0
71-15	7	9	•0300	59	118	Y	0	0	0	0
71-15	7	9	•0300	60	119	Y	0	0	0	0
71-15	7	9	•0300	60	120	Y	0	0	0	0

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## DOMINANT LETHAL GENE STUDY OF COMPOUND 71-15

## GUM ARABIC

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TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS	EARLY DEATHS	LATE DEATHS	CORPORA LUTEA
							L R	L R	L R	L R
71-15	7	M	5.0000	61	121	Y	7 5	0 0	0 0	3 8
71-15	7	M	5.0000	61	122	Y	7 6	0 0	7 7	5 6
71-15	7	M	5.0000	62	123	Y	9 6	0 0	9 9	5 7
71-15	7	M	5.0000	62	124	Y	9 6	0 0	9 9	5 7
71-15	7	M	5.0000	63	125	Y	9 6	1 1	6 6	3 7
71-15	7	M	5.0000	63	126	Y	9 6	0 0	0 0	6 7
71-15	7	M	5.0000	64	127	Y	9 6	0 0	0 0	6 7
71-15	7	M	5.0000	64	128	Y	8 7	0 0	0 0	6 7
71-15	7	M	5.0000	65	129	Y	8 7	0 0	0 0	6 7
71-15	7	M	5.0000	65	130	Y	6 6	0 0	0 0	9 10
71-15	7	M	5.0000	66	131	Y	6 6	0 0	0 0	7 6
71-15	7	M	5.0000	66	132	Y	5 5	0 0	0 0	9 9
71-15	7	M	5.0000	67	133	Y	5 5	0 0	0 0	5 5
71-15	7	M	5.0000	67	134	Y	4 4	0 0	0 0	8 8
71-15	7	M	5.0000	68	135	Y	7 7	0 0	0 0	7 7
71-15	7	M	5.0000	68	136	Y	6 6	0 0	0 0	7 7
71-15	7	M	5.0000	69	137	Y	6 6	0 0	0 0	7 7
71-15	7	M	5.0000	69	138	Y	6 6	0 0	0 0	7 7
71-15	7	M	5.0000	70	139	Y	7 7	0 0	0 0	7 7
71-15	7	M	5.0000	70	140	Y	7 7	0 0	0 0	7 7

DOMINANT LEITAL GENE STUDY OF COMPANY 71-15

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## DOMINANT LETHAL GENE STUDY OF COMPOUND 71-15

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SUMMARY

TEST MATERIAL	WEEK	S/N	DOSE	MALE NO.	FEMALE NO.	PREG.	EARLY DEATHS			LATE DEATHS			DEATHS			CORPORA LUTFA		
							L	R	P	L	R	P	L	R	P	L	R	P
71-15	8	5	2.500	61	121	Y	9	5	0	0	0	0	0	0	0	10	6	4
71-15	8	5	2.500	61	122	Y	9	3	0	0	0	0	0	0	0	11	4	7
71-15	8	5	2.500	62	124	Y	11	4	0	0	0	0	0	0	0	11	4	7
71-15	8	5	2.500	62	124	Y	8	7	0	0	0	0	0	0	0	6	7	5
71-15	8	5	2.500	63	125	Y	7	6	0	0	0	0	0	0	0	6	7	5
71-15	8	5	2.500	63	126	Y	7	5	0	0	0	0	0	0	0	7	1	1
71-15	8	5	2.500	64	127	Y	7	7	0	0	0	0	0	0	0	7	7	7
71-15	8	5	2.500	64	128	Y	6	7	0	0	0	0	0	0	0	6	7	9
71-15	8	5	2.500	65	129	Y	7	8	0	0	0	0	0	0	0	5	7	9
71-15	8	5	2.500	65	130	Y	5	6	0	0	0	0	0	0	0	5	4	5
71-15	8	5	2.500	66	131	Y	1	0	0	0	0	0	0	0	0	5	4	5
71-15	8	5	2.500	66	132	Y	7	5	0	0	0	0	0	0	0	5	4	5
71-15	8	5	2.500	67	133	Y	7	0	0	0	0	0	0	0	0	5	4	5
71-15	8	5	2.500	67	134	Y	0	5	0	0	0	0	0	0	0	5	4	5
71-15	8	5	2.500	68	135	Y	8	9	0	0	0	0	0	0	0	5	4	5
71-15	8	5	2.500	68	136	Y	9	9	0	0	0	0	0	0	0	5	4	5
71-15	8	5	2.500	69	137	Y	8	8	0	0	0	0	0	0	0	5	4	5
71-15	8	5	2.500	69	138	Y	9	9	0	0	0	0	0	0	0	5	4	5
71-15	8	5	2.500	70	139	Y	10	5	0	0	0	0	0	0	0	5	4	5
71-15	8	5	2.500	70	140	Y	5	5	0	0	0	0	0	0	0	5	4	5
71-15	8	5	2.500	71	141	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	7	6	8
71-15	8	5	2.500	71	142	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	6	5	7
71-15	8	5	2.500	72	143	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	6	5	7
71-15	8	5	2.500	72	144	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	6	5	7
71-15	8	5	2.500	73	145	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	6	5	7
71-15	8	5	2.500	73	146	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	6	5	7
71-15	8	5	2.500	74	147	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	6	5	7
71-15	8	5	2.500	74	148	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	6	5	7
71-15	8	5	2.500	75	149	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	6	5	7
71-15	8	5	2.500	75	150	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	6	5	7
71-15	8	5	2.500	76	151	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	6	5	7
71-15	8	5	2.500	76	152	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	6	5	7
71-15	8	5	2.500	77	153	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	6	5	7
71-15	8	5	2.500	77	154	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	6	5	7
71-15	8	5	2.500	78	155	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	6	5	7
71-15	8	5	2.500	78	156	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	6	5	7
71-15	8	5	2.500	79	157	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	6	5	7
71-15	8	5	2.500	79	158	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	6	5	7
71-15	8	5	2.500	80	159	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	6	5	7
71-15	8	5	2.500	80	160	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	6	5	7

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## DOMINANT LETHAL GENE STUDY OF COMPOUND 71-15

## GUM ARABIC

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TEST MATERIAL	WEEK	S/M	DOSF	MALE NO.	FEMALE NO.	PREG.	IMPLANTS	L	R	CORPORA LUTEA	L	R	L	R	L	R	L	R	L	R
TEM15	8	S	• 0002	11	21	Y	5	8	8	10	3	4	5	5	8	7	8	5	8	5
TEM15	8	S	• 0002	11	22	Y	7	8	8	10	3	4	5	5	8	7	8	5	8	5
TEM15	8	S	• 0002	12	23	Y	7	8	7	10	3	4	5	5	8	7	8	5	8	5
TEM15	8	S	• 0002	12	24	Y	7	8	7	10	3	4	5	5	8	7	8	5	8	5
TEM15	8	S	• 0002	13	25	Y	7	8	7	10	3	4	5	5	8	7	8	5	8	5
TEM15	8	S	• 0002	13	26	Y	7	8	7	10	3	4	5	5	8	7	8	5	8	5
TEM15	8	S	• 0002	14	27	Y	7	8	7	10	3	4	5	5	8	7	8	5	8	5
TEM15	8	S	• 0002	14	28	Y	7	8	7	10	3	4	5	5	8	7	8	5	8	5
TEM15	8	S	• 0002	14	29	Y	7	8	7	10	3	4	5	5	8	7	8	5	8	5
TEM15	8	S	• 0002	15	30	Y	7	8	7	10	3	4	5	5	8	7	8	5	8	5
TEM15	8	S	• 0002	15	31	Y	7	8	7	10	3	4	5	5	8	7	8	5	8	5
TEM15	8	S	• 0002	16	32	Y	7	8	7	10	3	4	5	5	8	7	8	5	8	5
TEM15	8	S	• 0002	16	33	Y	7	8	7	10	3	4	5	5	8	7	8	5	8	5
TEM15	8	S	• 0002	17	34	Y	7	8	7	10	3	4	5	5	8	7	8	5	8	5
TEM15	8	S	• 0002	17	35	Y	7	8	7	10	3	4	5	5	8	7	8	5	8	5
TEM15	8	S	• 0002	18	36	Y	7	8	7	10	3	4	5	5	8	7	8	5	8	5
TEM15	8	S	• 0002	18	37	Y	7	8	7	10	3	4	5	5	8	7	8	5	8	5
TEM15	8	S	• 0002	19	38	Y	7	8	7	10	3	4	5	5	8	7	8	5	8	5
TEM15	8	S	• 0002	19	39	Y	7	8	7	10	3	4	5	5	8	7	8	5	8	5
TEM15	8	S	• 0002	20	40	Y	7	8	7	10	3	4	5	5	8	7	8	5	8	5

## CHI-SQUARE TEST OF THE FERTILITY INDEX (1 DEGREE OF FREEDOM)

EFF.	VEHICLE CONTROL	30 MG/KG			2.5 G/KG			7.0 G/KG			TEM			•2 MG/KG						
		N		FERT.	N	N	FERT.	N	N	FERT.	N	N	FERT.	PRG	MTD	INDEX	CHISQ			
		PRG	MTD	INDEX	PRG	MTD	INDEX	PRG	MTD	INDEX	PRG	MTD	INDEX	PRG	MTD	INDEX	CHISQ			
SINGLE TREATMENT																				
1	9	2.6	.45	0.00	18	20	.90	7.29	11	20	.55	.10	18	20	.90	7.29	11	20	.55	.10
2	20	2.0	1.00	0.00	15	20	.75	3.66	19	20	.95	0.00	20	20	1.00	0.00	20	20	1.00	0.00
3	18	2.0	.90	0.00	15	20	.75	.69	18	20	.90	.28	19	20	.95	0.00	17	20	.85	0.00
4	19	2.0	.95	0.00	18	20	.90	0.00	17	20	.85	.28	18	20	.90	0.00	14	20	.70	2.77
5	16	2.0	.80	0.00	20	20	1.00	2.50	18	20	.90	.20	19	20	.95	.91	17	20	.85	0.00
6	12	2.0	.60	0.00	20	20	1.00	7.66	17	20	.85	2.01	20	20	1.00	7.66	20	20	1.00	7.66
7	17	2.0	.85	0.00	19	20	.95	.28	19	20	.95	.28	15	20	.75	.16	18	20	.90	0.00
8	20	2.0	1.00	0.00	20	20	1.00	0.00	20	20	1.00	0.00	19	20	.95	0.00	20	20	1.00	0.00
MULTIPLE TREATMENT																				
1	11	2.0	.55	0.00	20	20	1.00	9.18	14	20	.70	.43	16	20	.80	1.82				
2	16	2.0	.80	0.00	20	20	1.00	2.50	20	20	1.00	2.50	15	20	.75	0.00				
3	15	2.0	.75	0.00	20	20	1.00	3.66	19	20	.95	1.76	19	20	.95	1.76				
4	18	2.0	.90	0.00	18	20	.90	.28	19	20	.95	0.00	16	20	.80	.20				
5	14	2.0	.70	0.00	18	20	.90	1.41	20	20	1.00	4.90	18	20	.90	1.41				
6	17	2.0	.85	0.00	19	20	.95	.28	18	20	.90	0.00	15	20	.75	.16				
7	19	2.0	.95	0.00	19	20	.95	.53	20	20	1.00	0.00	20	20	1.00	0.00				

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ADAPTATION TEST FOR A LINEAR TREND IN PROPORTIONS FOR THE FERTILITY INDEX  
(1 DEGREE OF FREEDOM)  
BASED ON THE DOSE LEVELS

30 MG/KG    2.5 G/KG    5.0 G/KG

WEEK	N		N		N		CHISQ		ARMTG	
	PRG	MTD	PRG	MTD	PRG	MTD	(C-1)	(1)	CHISQ	ARMTG
1										

## SINGLE TREATMENT

1	18	20	11	20	18	20	9.62	.00	9.62	
2	15	20	19	20	20	20	7.78	.693	.85	
3	15	20	18	20	19	20	3.75	3.45	.30	
4	18	20	17	20	18	20	.32	.30	.32	
5	20	20	18	20	19	20	.11	.52	1.59	
6	20	20	17	20	20	20	6.32	.90	6.32	
7	19	20	19	20	15	20	5.18	3.90	1.28	
8	20	20	20	20	19	20	2.03	1.53	.50	

## MULTIPLE TREATMENT

1	20	20	14	20	16	20	6.72	2.86	3.86	
2	20	20	20	20	15	20	10.91	.821	2.69	
3	20	20	19	20	19	20	1.03	.77	.26	
4	18	20	19	20	16	20	2.26	.38	1.29	
5	18	20	20	20	18	20	2.14	.00	2.14	
6	19	20	18	20	15	20	3.75	3.47	.28	
7	19	20	20	20	20	20	2.03	1.52	.51	

**ARMITAGE TEST FOR A LINEAR TREND IN PROPORTIONS FOR THE FERTILITY INDEX  
(1 DEGREE OF FREEDOM)  
BASED ON THE LOGARITHMS OF THE DOSE LEVELS**

WEEK	3.0 MG/KG			2.5 MG/KG			5.0 MG/KG			CHISQ (1)	ARMITG CHISQ
	N	N	PRG MTD	N	N	PRG MTD	N	N	PRG MTD	(C-1)	-----
SINGLE TREATMENT											
1	18	20	11	20	18	20	9.62	1.45	8.18		
2	15	20	19	20	20	20	7.7H	7.75	.03		
3	15	20	18	20	19	20	3.75	3.70	.05		
4	14	20	17	20	18	20	.32	.05	.27		
5	20	20	14	20	19	20	2.11	1.34	.77		
6	20	20	17	20	20	20	6.32	.95	5.37		
7	19	20	19	20	15	20	5.18	1.99	3.29		
8	20	20	20	20	19	20	2.03	.74	1.29		
MULTIPLE TREATMENT											
1	20	20	14	20	16	20	6.72	5.40	1.32		
2	20	20	20	20	15	20	10.91	3.9H	6.93		
3	20	20	19	20	19	20	1.03	1.02	.02		
4	18	20	19	20	16	20	2.26	.22	2.05		
5	18	20	20	20	18	20	2.14	.32	1.82		
6	19	20	18	20	15	20	3.75	2.27	1.48		
7	19	20	20	20	20	20	2.03	2.96	.03		

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**ARMITAGE TEST FOR A LINEAR TREND IN PROPORTIONS FOR THE FERTILITY INDEX  
(2 DEGREES OF FREEDOM)**  
BASED ON THE DOSE LEVELS AND INCLUDING THE CONTROL GROUP

WEEK	CONTROL			3.0 MG/KG			2.5 MG/KG			5.0 MG/KG		
	N	N	PRG MTU	N	N	PRG MTU	N	N	PRG MTU	N	CHISQ (C-1)	ARMIG CHISQ (1)
SINGLE TREATMENT												
1	9	20	18	20	11	20	18	20	15.71	2.02	13.49	
2	20	20	15	20	19	20	20	20	12.25	3.15	9.10	
3	18	20	15	20	18	20	19	20	4.11	2.01	2.10	
4	19	20	18	20	17	20	18	20	1.11	.20	.91	
5	16	20	20	20	18	20	19	20	5.49	.37	5.11	
6	12	20	20	20	17	20	20	20	18.02	4.31	13.72	
7	17	20	19	20	19	20	15	20	5.03	2.03	3.00	
8	20	20	20	20	20	20	19	20	3.04	2.31	.73	
MULTIPLE TREATMENT												
1	11	20	20	20	14	20	16	20	11.80	.01	11.79	
2	16	20	20	20	20	20	15	20	10.39	1.90	8.49	
3	15	20	20	20	19	20	19	20	9.24	1.14	8.05	
4	18	20	18	20	19	20	16	20	2.39	.93	1.45	
5	14	20	18	20	20	20	18	20	8.69	2.05	6.63	
6	17	20	19	20	18	20	15	20	3.69	2.15	1.54	
7	19	20	19	20	20	20	20	20	2.05	1.68	.38	

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## T-TEST OF THE NUMBER OF IMPLANTATIONS IN PREGNANT FEMALES.

AFTER	CONTROL	71-15				30 MG/KG				71-15				2.5 MG/KG				71-15				5.0 MG/KG				TEM				.2 MG/KG				
		N	PRG MEAN	STD DEV	PRG MEAN	N	STD DEV	PRG MEAN	N	PRG MEAN	STD DEV	PRG MEAN	N	PRG MEAN	STD DEV	PRG MEAN	N	PRG MEAN	STD DEV	PRG MEAN	N	PRG MEAN	STD DEV	PRG MEAN	N	PRG MEAN	STD DEV	PRG MEAN	N	PRG MEAN	STD DEV	PRG MEAN		
SINGLE TREATMENT																																		
1	9	10.00	5.45	18	12.06	3.17	25	1.245	11	11.18	1.60	18	6.87	18	11.56	3.01	25	.962	11	7.82	5.10	18	.923											
2	20	8.86	4.09	15	11.20	3.73	33	1.785	19	11.89	2.38	37	2.871	20	11.65	2.78	38	2.580	20	9.65	3.44	38	.712											
3	18	11.06	2.78	15	11.80	1.93	31	.876	18	11.39	3.71	34	.305	19	12.21	2.42	35	1.352	17	9.76	3.54	33	1.203											
4	19	10.21	4.17	18	11.78	1.63	35	1.489	17	11.47	3.06	34	1.022	18	11.17	3.07	35	.790	14	6.71	3.67	31	2.502											
5	16	10.19	3.41	20	12.05	1.50	34	2.196	18	11.50	2.36	32	1.318	19	10.79	3.34	33	.526	17	11.71	2.05	31	1.290											
6	12	12.58	3.40	20	12.55	1.90	30	.036	17	11.35	2.91	27	1.046	20	10.10	3.95	30	1.812	20	11.35	2.54	30	.981											
7	17	10.35	3.72	19	10.95	3.34	34	.505	19	10.47	4.53	34	.087	15	12.53	1.60	30	2.100	18	10.94	2.60	33	.547											
8	20	12.00	2.08	20	13.10	1.46	38	1.927	20	12.75	2.20	38	1.109	19	12.68	2.05	37	.901	20	12.40	2.72	38	.522											
MULTIPLE TREATMENT																																		
1	11	12.14	1.47	20	11.70	3.25	29	.464	14	11.86	1.29	23	.587	16	12.37	3.12	25	.191																
2	16	11.50	2.48	26	11.15	2.89	34	.394	20	11.90	2.77	34	.451	15	11.27	2.40	29	.266																
3	15	11.40	1.86	20	12.25	1.89	33	1.320	19	11.47	2.55	32	.094	19	11.16	2.29	32	.330																
4	18	11.06	2.15	18	12.00	1.50	34	1.528	19	11.84	2.81	35	.951	16	11.19	2.69	32	.159																
5	14	11.79	3.21	18	11.61	2.70	30	.167	20	11.30	2.66	32	.481	18	10.83	2.75	30	.903																
6	17	11.94	3.80	19	12.00	1.15	34	.064	18	11.00	3.36	33	.777	15	12.60	1.18	30	.644																
7	19	11.79	1.87	19	11.84	2.14	36	.081	20	12.00	3.46	37	.234	20	12.80	1.40	37	1.915																

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## DOXINANT LETHAL STUDY OF COMPOUND 71-15

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REGRESSION FITS OF THE NUMBER. U. OF IMPLANTATIONS ON 1) DOSE, AND 2) LOG DOSE.  
( PREDICTED, U = A + B\*x )  
CONTROL GROUP EXCLUDED

GUM ARABIC

WEEK	X	N	XRA?	SN X	UHAR	SU U	A	T3	DF	VALU.X	CV U	VARH	VARA	VANUBAH	
1	DOSE	47	2.51	2.29	11.66	2.76	-1.100	11.911	-533 45	7.6738	*2407	.0354	.3909	.1675	
	LOG DOSE	47	-.51	2.40	11.66	2.76	-.124	11.996	-.721 45	7.8530	*2400	.0296	.1744	.1667	
2	DOSE	54	2.74	2.01	11.61	2.90	*.90	11.391	*402 52	8.5664	*2221	*0401	*4600	*1586	
	LOG DOSE	54	-.76	2.19	11.61	2.90	-.110	11.617	*500 52	8.5339	*2516	*0354	*1581	*1580	
3	DOSE	52	2.70	2.02	11.81	2.79	*.93	11.556	*478 50	7.9253	*2384	*0351	*4302	*1524	
	LOG DOSE	52	-.11	2.21	11.81	2.79	-.023	11.810	-.131 50	7.9598	*2384	*0321	*1534	*1531	
4	DOSE	53	2.51	2.07	11.47	2.63	-.123	11.780	-.694 51	6.9774	*2303	*0314	*3294	*1316	
	LOG DOSE	53	-.35	2.30	11.47	2.63	-.102	11.436	-.642 51	6.9863	*2304	*0253	*1349	*1318	
5	DOSE	57	2.47	2.07	11.46	2.51	-.253	12.061	-.1585 55	6.1578	*2160	*0256	*2637	*1020	
	LOG DOSE	57	-.47	2.32	11.46	2.51	-.204	11.374	-.1418 55	6.2118	*2176	*0206	*1124	*1090	
6	DOSE	57	2.51	2.10	11.33	3.16	-.493	12.571	-2.568 55	9.1025	*2662	*0369	*3920	*1597	
	LOG DOSE	57	-.39	2.33	11.33	3.16	-.411	11.172	-2.354 55	9.2612	*2685	*0305	*1672	*1625	
7	DOSE	53	2.32	2.00	11.23	3.52	.299	10.533	1.230 51	12.2498	*3114	*0589	*5487	*2311	
	LOG DOSE	53	-.47	2.31	11.23	3.52	.134	11.290	.630 51	12.3161	*3151	*0453	*2463	*2362	
8	DOSE	59	2.47	2.64	12.85	2.12	-.094	13.055	-.611 57	4.5601	*1662	*0189	*1927	*0773	
	LOG DOSE	59	-.36	2.29	12.85	2.12	-.090	12.819	-.658 57	4.5554	*1661	*0150	*0791	*0772	
MULTIPLE TREATMENTS															
1	DOSE	50	2.31	2.12	11.96	2.76	*134	11.651	*717 48	7.6663	*2315	*0348	*3394	*1533	
	LOG DOSE	50	-.63	2.39	11.96	2.76	.099	12.022	*596 48	7.6915	*2319	*0275	*1648	*1538	
2	DOSE	55	2.28	1.99	11.45	2.69	*.038	11.369	*202 53	7.3937	*2312	*0346	*3149	*1342	
	LOG DOSE	55	-.50	2.31	11.45	2.69	.087	11.498	*53 53	7.3484	*2367	*0255	*1401	*1336	
3	DOSE	58	2.47	2.05	11.64	2.26	*.220	12.182	-.1530 56	4.9948	*1920	*0208	*2124	*0861	
	LOG DOSE	58	-.38	2.30	11.64	2.26	-.200	11.562	-.1556 56	4.9878	*1919	*0165	*0884	*0860	
4	DOSE	53	2.42	2.01	11.70	2.38	-.152	12.099	-.981 51	5.6804	*2037	*0271	*2655	*1072	
	LOG DOSE	53	-.38	2.29	11.70	2.38	-.109	11.657	-.754 51	5.7239	*2045	*0211	*1110	*1080	
5	DOSE	56	2.51	2.01	11.25	2.67	*.157	11.643	*.872 54	7.1676	*2380	*0322	*3311	*1280	
	LOG DOSE	56	-.28	2.26	11.25	2.67	-.121	11.216	-.756 54	7.1924	*2384	*0257	*1305	*1284	
6	DOSE	52	2.32	2.32	11.83	2.25	*.100	11.594	*640 50	5.1070	*1911	*0244	*2302	*0982	
	LOG DOSE	52	-.50	2.32	11.83	2.25	-.024	11.815	-.173 50	5.1458	*1918	*0187	*1036	*0990	
7	DOSE	59	2.55	2.04	12.22	2.45	*.194	11.725	1.217 57	6.1239	*2025	*0254	*2695	*1038	
	LOG DOSE	59	-.57	2.27	12.22	2.45	-.134	12.257	-.927 57	6.1897	*2037	*0208	*1065	*1049	

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## DOMINANT LETHAL GENE STUDY OF COMPOUND 71-15 . GUM ARABIC

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REGRESSION FITS OF THE NUMBER, U, OF IMPLANTATIONS ON DOSE.  
( PREDICTED U = A + BX )

DOSE	X	N	XB49	SINGLE TREATMENT						MULTIPLE TREATMENTS						VARB	VARA	VAKUBAR
				SD X	UBAR	SD U	B	A	TB	DF	VARU.X	CV U	SD X	UBAR	SD U	B	A	TB
1	DOSE	56	2.11	2.22	11.39	3.34	.034	11.321	.166 54	11.3897	.2962	.0422	3.908	.434				
2	DOSE	74	2.00	2.10	10.85	3.47	.401	10.049	2.127 72	11.4913	.3124	.0326	.2975	.1553				
3	DOSE	70	2.61	2.10	11.61	2.79	.152	11.309	.955 68	7.7866	.2403	.0255	.2138	.1112				
4	DOSE	72	1.85	2.09	11.14	3.13	.055	11.038	.305 70	9.9098	.2426	.0319	.2466	.1376				
5	DOSE	73	1.93	2.10	11.18	2.76	-.069	11.311	-.443 71	7.7066	.2484	.0243	.1958	.1056				
6	DOSE	69	2.67	2.13	11.55	3.22	-.494	12.575	-2.839 67	9.3665	.2650	.0303	.2659	.1357				
7	DOSE	76	1.76	2.01	11.01	3.56	.318	10.455	1.501 68	12.4549	.3204	.0449	.3167	.1779				
8	DOSE	79	1.84	2.06	12.63	2.13	.033	12.572	.282 77	4.5973	.1697	.0139	.053	.0582				

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T-TEST TEST OF THE (TRANSFORMED) PRE-IMPLANTATION LOSSES IN PREGNANT FEMALES.  
 (LOSSES TAKEN AS A SUBSET OF THE SET OF CORPORA LUTEA)

WEEK	CONTROL			71-15 30 MG/KG.			71-15 2.5 G/KG			71-15 5.0 G/KG			TEM			•2 MG/KG						
	N PRG	MEAN PRG	STD DEV	N PRG	MEAN PRG	STD DEV	N PRG	MEAN PRG	STD DEV	N PRG	MEAN PRG	STD DEV	N PRG	MEAN PRG	STD DEV	N PRG	MEAN PRG	STD DEV				
SINGLE TREATMENT																						
1 9	1.02	.87	.18	.53	.54	.25	1.781	1.1	.79	.36	1.8	.88	.62	.25	.477	11	1.33	.80	.18	.466		
2 20	.97	.67	.15	.70	.56	.33	1.301	1.9	.53	.44	.37	2.443	.20	.54	.48	.38	2.371	.20	.97	.54	.38	.066
3 18	.59	.42	.15	.44	.24	.31	1.234	1.8	.65	.65	.34	.326	.19	.47	.31	.35	.963	.17	.74	.64	.33	.832
4 19	.89	.69	.18	.59	.29	.35	1.684	1.7	.81	.52	.34	.379	.18	.68	.54	.35	1.017	.14	1.42	.63	.31	2.201
5 16	.83	.58	.20	.60	.33	.34	1.496	1.8	.59	.41	.32	1.436	.19	.69	.63	.33	.691	.17	.71	.39	.31	.728
6 12	.51	.52	.20	.45	.27	.30	.420	1.7	.57	.33	.27	.401	.20	.74	.61	.30	1.081	.20	.52	.41	.30	.052
7 17	.76	.64	.19	.70	.60	.34	.311	1.9	.82	.64	.34	.277	.15	.55	.29	.30	1.183	.18	.76	.49	.33	.050
A 25	.66	.45	.20	.51	.28	.38	1.243	2.0	.55	.35	.38	.848	.19	.52	.46	.37	.999	.20	.45	.43	.38	1.482
MULTIPLE TREATMENT																						
1 11	.48	.27	.20	.59	.56	.29	.553	1.4	.58	.26	.23	.909	.16	.54	.51	.25	.406					
2 16	.43	.30	.20	.54	.40	.34	.973	2.0	.41	.28	.34	.147	.15	.60	.40	.29	1.384					
3 15	.69	.21	.20	.61	.32	.34	.803	1.9	.69	.45	.32	.006	.19	.73	.40	.32	.381					
4 18	.62	.33	.18	.58	.30	.34	.335	1.9	.52	.45	.35	.786	.16	.59	.43	.32	.190					
5 14	.55	.56	.18	.60	.41	.30	.304	2.0	.57	.44	.32	.115	.18	.56	.45	.30	.053					
6 17	.72	.61	.19	.54	.35	.34	1.081	1.8	.61	.59	.33	.540	.15	.41	.24	.30	1.857					
7 19	.67	.35	.19	.52	.34	.36	1.340	2.0	.77	.54	.37	.681	.20	.62	.29	.37	.504					

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## T-TEST OF THE (TRANSFORMED) NUMBER OF DEAD IMPLANTS.

WEEK	CONTROL		71-15 20 MG/KG				71-15 2.5 MG/KG				71-15 5.0 MG/KG				71-15 10 MG/KG								
	N PRG	MEAN PRG	N PRG	STD DEV	MEAN PRG	STD DEV	N PRG	MEAN PRG	STD DEV	MEAN PRG	N PRG	STD DEV	N PRG	MEAN PRG	N PRG	STD DEV	N PRG	MEAN PRG					
SINGLE TREATMENT																							
1	9	.47	.18	.18	.64	.33	.25	1.414	11	.45	.26	.18	.182	18	.46	.32	.25	.056	11	.93	.56	18	<b>.445</b>
2	20	.46	.24	.15	.53	.31	.33	.796	19	.44	.21	.37	.181	20	.51	.41	.38	.470	20	1.56	.51	38	<b>.6910</b>
3	18	.43	.25	.15	.75	.54	.31	2.224	16	.62	.34	.34	1.844	19	.72	.43	.35	2.458	17	1.70	.62	33	<b>.7980</b>
4	19	.53	.27	.16	.51	.30	.35	.158	17	.59	.43	.34	.517	18	.71	.40	.35	1.678	14	1.12	.59	31	<b>.3824</b>
5	16	.46	.33	.20	.48	.30	.34	.156	18	.54	.30	.32	.672	19	.52	.33	.33	.509	17	1.06	.61	31	<b>.3471</b>
6	12	.55	.30	.20	.53	.39	.30	.318	17	.55	.35	.27	.036	20	.46	.34	.30	.729	20	.52	.27	30	<b>.321</b>
7	17	.49	.30	.19	.69	.29	.34	.663	19	.64	.36	.34	1.333	15	.58	.33	.30	.747	18	.46	.20	33	<b>.363</b>
A	20	.48	.25	.20	.63	.32	.38	1.689	20	.42	.23	.38	.725	19	.47	.26	.37	.096	20	.41	.32	38	<b>.667</b>
MULTIPLE TREATMENT																							
1	11	.53	.34	.20	.57	.31	.29	.395	14	.56	.34	.23	.223	16	.42	.22	.25	.960					
2	15	.46	.35	.21	.54	.38	.34	.643	20	.64	.41	.34	1.420	15	.52	.24	.29	.569					
3	15	.65	.32	.20	.55	.25	.33	1.151	19	.54	.32	.32	1.057	19	.56	.38	.32	.796					
4	18	.54	.34	.18	.49	.29	.34	.529	19	.62	.31	.35	.746	16	.53	.24	.32	.131					
5	14	.51	.22	.18	.51	.34	.30	.031	20	.52	.39	.32	.123	18	.50	.35	.30	.101					
6	17	.65	.37	.19	.48	.29	.34	1.533	18	.59	.35	.33	1.195	15	.64	.38	.30	.073					
7	19	.45	.29	.19	.41	.23	.36	.452	20	.48	.31	.37	.307	20	.52	.26	.37	.648					

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## CHI-SQUARE TEST OF THE DEATH INDEX (1 DEGREE OF FREEDOM)

WEEK	VEHICLE CONTROL	71-15 30 MG/KG			71-15 2.5 G/KG			71-15 5.0 G/KG			TEM 2 MG/KG										
		N	N WDI PRG INDEX																		
SINGLE TREATMENT																					
1	5	9	.56	0.00	12	18	.67	.02	.4	11	.36	.17	7	1A	.39	.17	8	11	.73	.11	
2	7	20	.35	0.00	7	15	.47	.12	8	19	.42	.02	7	20	.35	.11	20	20	1.00	16.41	
3	5	18	.28	0.00	10	15	.67	3.55	11	18	.61	2.81	13	19	.68	4.59	17	17	1.00	16.56	
4	10	19	.53	0.00	8	18	.44	.03	9	17	.53	.10	13	1A	.72	.79	12	14	.86	2.62	
5	5	16	.31	0.00	6	20	.40	.04	9	18	.50	.58	9	19	.47	.39	13	17	.76	5.10	
6	7	12	.58	0.00	10	20	.50	.01	8	17	.47	.05	5	20	.25	2.28	10	20	.50	.01	
7	7	17	.41	0.00	8	19	.42	.06	13	19	.68	1.71	8	15	.53	.11	9	18	.50	.03	
8	9	20	.45	0.00	13	20	.65	.91	7	20	.35	.10	8	19	.42	.02	5	20	.25	.99	
MULTIPLE TREATMENT																					
1	5	11	.45	0.00	12	20	.60	.16	7	14	.50	.03	6	1A	.38	.00					
2	4	16	.25	0.00	8	21	.40	.35	11	20	.55	2.17	8	15	.53	1.56					
3	11	15	.73	0.00	12	20	.60	.21	9	19	.47	1.38	8	19	.42	2.17					
4	8	18	.44	0.00	7	18	.39	0.00	12	19	.63	.66	9	16	.56	.12					
5	9	14	.57	0.00	7	18	.39	.45	7	20	.35	.86	6	1A	.33	.98					
6	11	17	.65	0.00	7	19	.37	1.78	6	18	.33	2.30	9	15	.60	.01					
7	6	19	.32	0.00	5	19	.26	0.00	8	20	.40	.05	11	20	.55	1.33					

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## DOMINANT LETHAL GENE STUDY OF COMPOUND 71-13

PAGE 49

ARMITAGE TEST FOR A LINEAR TREND IN PROPORTIONS FOR THE DEATH INDEX  
(1 DEGREE OF FREEDOM)

WJM AWADIC

ARMITAGE  
BASED ON THE NOSE LEVELS

WEEK	30 mg/kg			2.5 mg/kg			5.0 mg/kg		
	N WDI	N PRG	N WDI PRG	N WDI	N PRG	CHISQ (C-L)	CHISQ (L)	ARMING CHISQ	

## SINGLE TREATMENT

1	12	14	4	11	7	18	3.69	2.77	.92
2	7	15	8	19	7	20	.51	.50	.01
3	10	15	11	14	13	19	.23	.12	.21
4	9	18	9	17	13	18	2.96	2.83	.13
5	8	21	9	18	9	19	.42	.22	.20
6	10	20	8	17	5	21	3.05	2.50	.45
7	8	19	13	19	8	15	2.67	.57	2.11
8	13	21	7	20	8	19	3.93	2.99	1.84

## MULTIPLE TREATMENT

1	12	21	7	14	6	16	1.80	1.79	.01
2	8	20	11	21	8	15	1.05	.69	.35
3	12	20	9	19	8	19	1.33	1.25	.07
4	7	18	12	19	9	16	2.29	1.10	1.26
5	7	18	7	21	6	18	.13	.12	.01
6	7	19	6	18	9	15	2.75	1.57	1.04
7	5	19	8	20	11	20	3.33	3.32	.00

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## DOMINANT LETHAL GENE STUDY OF COMPOUND 71-15 GUM ARAHIC

PAGE 50

ARMITAGE TEST FOR A LINEAR TREND IN PROPORTIONS FOR THE DEATH RATE BASED ON THE LOGARITHMS OF THE DOSE LEVELS  
(1 DEGREE OF FREEDOM)

3.0 MG/KG 2.5 MG/KG 5.0 MG/KG

WEEK	N	N	N	N	WDI DPG	WDI DPG (C-1)	CHISQ (1)	CHISQ (11)	ARMIG CHISQ
1	12	14	4	11	7	18	3.69	3.57	.12
2	7	13	8	13	7	20	.51	.37	.14
3	10	15	11	18	13	19	.23	.00	.23
4	8	13	9	17	13	18	2.96	2.00	.97
5	8	21	9	18	9	19	.42	.36	.06
6	10	20	8	17	5	20	3.05	1.56	1.49
7	8	19	13	19	8	15	2.57	1.59	1.58
8	13	20	7	20	8	19	3.93	3.47	.46

## SINGLE TREATMENT

1	12	14	4	11	7	18	3.69	3.57	.12
2	7	13	8	13	7	20	.51	.37	.14
3	10	15	11	18	13	19	.23	.00	.23
4	8	13	9	17	13	18	2.96	2.00	.97
5	8	21	9	18	9	19	.42	.36	.06
6	10	20	8	17	5	20	3.05	1.56	1.49
7	8	19	13	19	8	15	2.57	1.59	1.58
8	13	20	7	20	8	19	3.93	3.47	.46

## MULTIPLE TREATMENT

1	12	20	7	14	5	16	1.80	1.50	.30
2	8	20	11	20	8	15	1.05	1.00	.05
3	12	20	9	19	8	19	1.33	1.24	.03
4	7	18	12	19	9	16	2.29	1.95	.34
5	7	18	7	20	6	18	.13	.12	.00
6	7	19	6	18	9	15	2.75	.62	2.13
7	5	19	8	20	11	20	3.33	2.75	.54

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## DOMINANT LETHAL GENE STUDY OF COMPOUND 71-15 GUN AKAHIC

PAGE 51

ARMITAGE TEST FOR A LINEAR TREND IN PROPORTIONS FOR THE DEATH INDEX  
(2 DEGREES OF FREEDOM)

BASED ON THE DOSE LEVELS AND INCLUDING THE CONTROL GROUP

NFEK	CONTROL			3.0 MG/KG			2.5 MG/KG			5.0 MG/KG		
	N	N	WDI PRG	N	N	WDI PRG	N	N	WDI PRG	N	N	WDI PRG
SINGLE TREATMENT												
1	5	9	12	13	4	11	7	18	3.082	2.076	1.05	
2	7	20	7	15	8	19	7	20	.71	.10	.61	
3	5	13	10	15	11	18	13	19	7.39	2.81	5.07	
4	10	19	8	18	9	17	13	18	3.04	2.49	.54	
5	5	10	8	20	9	16	9	19	1.48	.93	.64	
6	7	12	10	20	8	17	5	20	4.29	3.76	.53	
7	7	17	8	19	13	19	8	15	3.59	1.29	2.31	
8	9	20	13	20	7	20	8	19	3.97	1.29	2.69	
MULTIPLE TREATMENT												
1	5	11	12	20	7	14	6	15	1.89	1.21	.67	
2	4	16	8	20	11	20	8	15	3.39	2.44	1.55	
3	11	15	12	20	9	19	8	19	3.95	3.12	.84	
4	8	13	7	14	12	19	9	16	2.66	1.47	1.19	
5	9	14	7	19	7	20	6	18	2.27	1.03	1.24	
6	11	17	7	19	6	18	9	15	5.27	.09	5.17	
7	6	19	5	19	8	20	11	20	3.90	3.76	.14	

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## DOMINANT LETHAL GENE STUDY OF COMPOUND 71-15

GUM ARABIC

PAGE 52

PROBIT ANALYSIS OF THE PROPORTION OF PREGNANT FEMALES WITH 1 OR MORE DEAD IMPLANTS  
PROBIT = A + B( LOG DOSE )

WEEK	A	B	CHISQ	DF
<b>SINGLE TREATMENT</b>				
1	-.343	4.899	.12	1
2	-.111	4.762	.14	1
3	-.011	5.395	.23	1
4	.248	5.208	1.04	1
5	.101	4.907	.06	1
6	-.209	4.715	1.60	1
7	.220	5.165	1.11	1
8	-.313	4.888	.48	1
<b>MULTIPLE TREATMENT</b>				
1	-.214	4.942	.31	1
2	.172	5.014	.05	1
3	-.190	4.969	.04	1
4	.247	5.112	.35	1
5	-.062	4.626	.00	1
6	.139	4.834	2.09	1
7	.293	4.787	.54	1

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T-TEST OF THE (TRANSFORMED) NUMBER OF DEAD IMPLANTS.  
 DEAD IMPLANTS TAKEN AS A SUBSET OF THE SET OF IMPLANTS.

REPK	CONTROLS		71-15		30 MG/KG		71-15		2.5 G/KG		71-15		5.0 G/KG		TEM		•2 MG/KG										
	N	STD	N	STD	MEAN	DEV	N	PHG	MEAN	STD	DEV	DF	T	N	PRG	MEAN	STD	DEV	DF	T	N	PRG	MEAN	STD	DEV	DF	T
SINGLE TREATMENT																											
1	9	.53	.16	.18	.74	.55	25	.836	11	.44	.27	18	.960	18	.62	.57	.25	.192	11	.43	.83	.18	.941				
2	20	.56	.39	.15	.56	.32	33	.199	19	.48	.26	37	.868	20	.60	.61	.38	.263	20	.89	.55	.38	.945				
3	18	.47	.31	.15	.77	.56	31	1.973	18	.75	.55	34	1.869	19	.74	.43	.35	2.193	17	.98	.62	.33	.929				
4	19	.62	.31	.18	.53	.31	35	.899	17	.72	.61	34	.601	18	.82	.55	.35	1.980	14	1.80	.91	.31	.526				
5	16	.54	.61	.20	.51	.32	34	.545	18	.57	.34	32	.114	19	.59	.37	.33	.066	17	1.19	.74	.31	.2504				
6	12	.61	.38	.20	.52	.43	31	.038	17	.58	.39	27	.225	20	.53	.37	.39	.625	20	.56	.33	.30	.433				
7	17	.59	.41	.19	.60	.51	34	.069	19	.84	.69	34	1.330	15	.60	.35	.30	.094	14	.51	.20	.33	.176				
8	20	.52	.30	.20	.65	.33	38	1.307	20	.44	.23	38	1.008	19	.49	.27	.37	.303	20	.43	.32	.38	.948				
MULTIPLE TREATMENT																											
1	11	.54	.34	.20	.68	.51	29	.812	14	.58	.35	23	.255	16	.45	.22	.25	.810									
2	16	.67	.36	.20	.61	.56	34	.868	20	.66	.43	34	1.410	15	.55	.25	.29	.744									
3	15	.70	.34	.20	.58	.28	33	1.086	19	.59	.35	32	.901	19	.62	.45	.32	.525									
4	18	.57	.34	.18	.51	.31	34	.528	19	.71	.54	35	.989	16	.58	.35	.32	.140									
5	14	.54	.21	.18	.53	.34	30	.106	20	.58	.47	32	.287	18	.57	.50	.30	.210									
6	17	.79	.55	.19	.51	.33	34	1.829	18	.61	.60	33	.880	15	.65	.38	.30	.898									
7	19	.44	.36	.19	.42	.24	36	.644	20	.54	.35	37	.445	20	.55	.28	.37	.624									

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GUM ARABIC  
CONTROL GROUP ANOVA FOR THE NUMBER OF PREGNANT FEMALES

WEEK	BETWEEN HALFS			WITHIN MALES			TOTAL			F
	SUMSQ	DF	MEANSQ	SUMSQ	DF	MEANSQ	SUMSQ	DF		
SINGLE TREATMENT										
1	3.450	9	.383	1.500	10	.150	4.950	19	2.556	
2	0.000	9	0.000	0.000	10	0.000	0.000	19	1	
3	.800	9	.089	1.000	10	.100	1.800	19	.889	
4	.450	9	.050	.500	10	.050	.950	19	1.000	
5	1.200	9	.133	2.000	10	.200	3.200	19	.667	
6	3.800	9	.422	1.000	10	.100	4.800	19	4.222	
7	1.050	9	.117	1.500	10	.150	2.550	19	.778	
8	0.000	9	0.000	0.000	10	0.000	0.000	19	1	
MULTIPLE TREATMENT										
1	3.450	9	.383	1.500	10	.150	4.950	19	2.556	
2	2.200	9	.244	1.000	10	.100	3.200	19	2.444	
3	1.250	9	.139	2.500	10	.250	3.750	19	.556	
4	.800	9	.089	1.000	10	.100	1.800	19	.889	
5	1.200	9	.133	3.000	10	.300	4.200	19	.444	
6	1.050	9	.117	1.500	10	.150	2.550	19	.778	
7	.450	9	.050	.500	10	.050	.950	19	1.000	

Q3

## CONTROL GROUP ANOVA FOR THE NUMBER OF IMPLANTATIONS PER PREGNANT FEMALE

WEEK	BETWEEN MALES			WITHIN MALES			TOTAL		
	SUMSQ	DF	MEANSA	SUMSQ	DF	MEANSA	SUMSQ	DF	F
SINGLE TREATMENT									
1	189.250	5	37.850	55.000	3	18.333	244.250	8	2.065
2	138.206	9	15.356	179.000	10	17.900	317.200	19	.858
3	110.125	9	12.236	21.500	8	2.688	131.625	17	4.553
4	71.311	9	7.923	242.000	9	26.889	313.310	18	.295
5	152.560	9	16.951	22.000	6	3.667	174.560	15	4.623
6	124.561	6	20.760	5.500	5	1.100	130.061	11	18.873
7	149.280	9	16.587	76.000	7	10.857	225.280	16	1.528
8	30.000	9	3.333	52.000	10	5.200	82.000	19	.641
MULTIPLE TREATMENT									
1	17.474	6	2.912	4.500	4	1.125	21.974	10	2.589
2	44.049	8	5.506	48.000	7	6.857	92.049	15	.803
3	27.750	9	3.083	22.000	5	4.400	49.750	14	.701
4	24.980	9	2.776	54.000	8	6.750	78.980	17	.411
5	65.540	9	7.282	69.000	4	17.250	134.540	13	.422
6	219.930	9	24.437	18.000	7	2.571	237.930	16	9.503
7	22.160	9	2.462	41.000	9	4.556	63.160	18	.540

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GUM ARABIC  
CONTROL GROUP ANOVA FOR THE PRE-IMPLANTATION LOSS PER PREGNANT FEMALE

WEEK	BETWEEN MALES			WITHIN MALES			TOTAL		
	SUMSQ	DF	MEANQ	SUMSQ	DF	MEANQ	SUMSQ	DF	MEANQ
1	108.562	5	21.712	50.500	3	16.833	159.062	8	1.290
2	86.800	9	9.644	60.000	10	6.000	146.800	19	1.607
3	30.605	9	3.401	8.500	8	1.063	39.105	17	3.201
4	81.047	9	9.005	147.500	9	16.389	228.547	18	.549
5	67.160	9	7.462	28.000	6	4.667	95.160	15	1.599
6	73.500	6	12.250	1.500	5	.300	75.000	11	40.833
7	127.842	9	14.205	43.500	7	6.214	171.342	16	2.286
8	56.200	9	6.244	73.000	10	7.309	129.200	19	.855
MULTIPLE TREATMENT									
1	6.046	6	1.008	2.500	4	.625	8.546	10	1.612
2	5.253	8	.657	4.500	7	.643	9.753	15	1.021
3	5.550	9	.617	3.000	5	.600	8.550	14	1.028
4	7.545	9	.838	18.500	8	2.313	26.045	17	.363
5	95.000	9	10.556	5.000	4	1.250	100.000	13	8.444
6	450.280	9	50.031	7.000	7	1.000	457.280	16	50.031
7	11.147	9	1.239	29.500	9	3.278	40.647	18	.378

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## CONTROL GROUP ANOVA FOR THE NUMBER OF DEAD IMPLANTS PER PREGNANT FEMALE

GIJM ARABIC

WEEK	BETWEEN MALES			WITHIN MALES			TOTAL		
	SUMSQ	DF	MEANSQ	SUMSQ			MEANSQ	SUMSQ	DF
				SINGLE TREATMENT					
1	1.250	5	.250	1.000	3	.333	2.250	8	.750
2	4.450	9	.494	4.500	10	.450	8.950	19	1.099
3	7.480	9	.831	3.000	8	.375	10.480	17	2.216
4	10.160	9	1.129	7.000	9	.778	17.160	18	1.451
5	15.240	9	1.693	3.000	6	.500	18.240	15	3.387
6	3.418	6	.570	11.500	5	2.300	14.918	11	.248
7	8.543	9	.949	5.500	7	.786	14.043	16	1.208
8	10.200	9	1.133	8.000	10	.800	18.200	19	1.417
MULTIPLE TREATMENT									
1	14.413	6	2.402	8.500	4	2.125	22.913	10	1.130
2	14.827	8	1.823	21.000	7	3.000	35.827	15	.619
3	8.337	9	.926	7.500	5	1.500	15.837	14	.618
4	24.000	9	2.667	6.000	8	.750	30.000	17	3.556
5	2.715	9	.302	2.500	4	.625	5.215	13	.483
6	42.520	9	4.724	12.000	7	1.714	54.520	16	2.756
7	5.147	9	.572	11.500	9	1.278	16.647	18	.448

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## CONTROL GROUP ANOVA FOR THE RATIO OF DEAD IMPLANTS TO TOTAL IMPLANTS PER PREGNANT FEMALE

WEEK	BETWEEN HALFS			WITHIN MALES			TOTAL			F	
	SUMSQ	DF	MEANSQ	SUMSQ	DF	MEANSQ	SUMSQ	DF	MEANSQ		
SINGLE TREATMENT											
1	.008	5	.002	.005	3	.002	.013	8	.940		
2	.098	9	.011	.091	10	.009	.189	19	1.203		
3	.088	9	.010	.062	8	.008	.150	17	1.253		
4	.123	9	.014	.084	9	.009	.207	18	1.462		
5	.675	9	.075	.506	6	.084	1.181	15	.890		
6	.211	6	.035	.083	5	.017	.294	14	2.119		
7	.288	9	.032	.082	7	.012	.370	16	2.733		
8	.087	9	.010	.051	10	.005	.138	19	1.921		
MULTIPLE TREATMENT											
1	.094	6	.016	.047	4	.012	.141	10	1.329		
2	.180	8	.022	.144	7	.021	.324	15	1.094		
3	.235	9	.026	.105	5	.021	.339	14	1.248		
4	.165	9	.018	.053	8	.007	.218	17	2.783		
5	.088	9	.010	.017	4	.004	.105	13	2.233		
6	.964	9	.107	.063	7	.009	1.027	16	11.684		
7	.221	9	.025	.171	9	.019	.392	18	1.291		

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## T-TEST OF THE NUMBER OF CORPORA LUTEA IN PREGNANT FEMALES.

WEEK	CONTROL		71-15 3n MG/KG		71-15 2.5 G/KG		71-15 5.0 G/KG		TEM		*2 MG/KG	
	N PRG	MEAN DEV	N PRG	STD MEAN	N PRG	STD MEAN	N PRG	STD MEAN	N PRG	MEAN DEV	N PRG	MEAN DEV
SINGLE TREATMENT												
1	9	13.67	1.58	18	13.22	1.26	25	.793	11	13.27	1.68	18
2	20	11.40	2.16	15	12.73	2.02	33	1.858	19	13.09	1.45	37
3	18	12.00	1.81	15	12.27	2.05	31	.396	18	13.06	1.59	34
4	19	12.84	1.42	18	12.83	1.69	35	.017	17	13.82	1.91	34
5	16	12.37	1.75	20	13.30	1.87	34	1.520	18	12.61	1.42	32
6	12	13.58	1.56	20	13.10	1.74	30	.788	17	12.12	2.71	27
7	17	12.53	1.81	19	12.79	1.47	34	.475	19	12.37	2.79	34
8	20	13.80	1.85	20	13.95	1.36	38	.292	20	13.75	1.37	38
MULTIPLE TREATMENT												
1	17	12.82	1.17	20	13.20	2.04	29	.568	14	12.79	1.05	23
2	16	11.88	1.86	20	11.90	2.27	34	.036	20	12.20	2.65	34
3	15	12.60	1.76	20	13.50	1.93	33	1.414	19	13.21	2.32	32
4	18	12.06	1.59	18	13.06	1.39	34	2.008	19	12.68	1.60	35
5	14	13.07	2.30	18	12.78	1.86	30	.399	20	12.25	1.62	32
6	17	14.41	2.94	19	13.21	2.51	34	1.324	18	12.33	2.38	33
7	19	13.21	1.27	19	12.68	1.83	36	1.030	20	14.15	1.98	37

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August 1972

Compound Report No. 3 (Statistical Addendum--Dominant Lethal Gene Data)

STUDY OF MUTAGENIC EFFECTS OF GUM ARABIC (FDA No. 71-15)

Prepared for:

DHEW/PUBLIC HEALTH SERVICE  
Food and Drug Administration  
Rockville, Maryland

Contract No. FDA 71-267

SRI Project LSU-1348

Submitted by:

G. W. Newell and W. A. Maxwell

Approved:

*W.A. Skinner*  
W. A. Skinner, Executive Director  
Life Sciences Division

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## STATISTICAL SUMMARY

This addendum presents statistical treatment of the dominant lethal gene data for Gum Arabic, using the procedural outline of Miss Janet Springer, FDA. A description of the statistical procedures and an explanation of how the computations are accomplished were presented as Appendix A of Compound Report No. 8, Guar Gum (71-16). Summary tables of experimental data also are included for reference.

A review of these statistical evaluations continues to support the conclusions presented in the main report: i.e., Gum Arabic is not a mutagenic substance by the dominant lethal gene test.

September 1972

Compound Report No. 3 (Addendum--Acute Host-Mediated Assay)

STUDY OF MUTAGENIC EFFECTS OF GUM ARABIC (FDA No. 71-15)

Prepared for:

DHEW/PUBLIC HEALTH SERVICE  
Food and Drug Administration  
Rockville, Maryland

Contract No. FDA 71-267

SRI Project LSU-1348

Submitted by:

G. W. Newell and W. A. Maxwell

Approved:



W. A. Skinner, Executive Director  
Life Sciences Division

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## INTRODUCTION

Under contract to the Food and Drug Administration, Stanford Research Institute is examining the mutagenicity of 14 selected chemical compounds (Contract No. FDA 71-267). This report is an addendum to the third compound report on tests conducted on gum arabic (FDA 71-15).

In the acute host-mediated assay for Salmonella typhimurium G-46 the negative control value was approximately 100-fold higher than the expected value. The other frequencies in this test group also appeared to be proportionately higher. At the request of FDA the initial study was repeated to determine if, as shown by this result, gum arabic has no mutagenic effect on S. typhimurium G-46 in the host-mediated assay during an acute exposure.

## SUMMARY

Gum arabic (71-15) caused no mutagenic response on S. typhimurium G-46 when administered on an acute basis. The results for this are shown in Tables 1 and 2.

Table 1  
HOST MEDIATED ASSAY  
SUMMARY OF DATA

Compound No.: 71-15 (Gum Arabic)

A. Acute

Treatment	Organism					
	Salmonella				Saccharomyces	
	G <small>46</small>		TA 1530		D-3	
	MF	MFT/ MFC	MF	MFT/ MFC	RF	RFT/ RFC
Maximum	$1.89 \times 10^{-8}$	1.62				
Intermediate	$1.15 \times 10^{-8}$	0.98				
Low Level	$1.97 \times 10^{-8}$	1.68				
Control (+)	$6.01 \times 10^{-7}$	51.37				
Control (-)	$1.17 \times 10^{-8}$	1.00				

B. Subacute

Treatment	Organism					
	Salmonella				Saccharomyces	
	G <small>46</small>		TA 1530		D-3	
	MF	MFT/ MFC	MF	MFT/ MFC	RF	RFT/ RFC
Maximum						
Intermediate						
Low Level						
Control (-)						

Table 2

HOST MEDIATED ASSAY  
INDIVIDUAL MOUSE DATA

Compound No.: 71-15 (GUM ARABIC)

Organism: G-46

Treatment: CONTROL (+)

**A. Acute**

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.28583333333ex 03	.77500000000ex 09	.368817204300ex-06
2	.61833333330ex 03	.68000000000ex 09	.909313725485ex-06
3	.76250000000ex 03	.76666666665ex 09	.994565217393ex-06
4	.40916666666ex 03	.68833333330ex 09	.594430992737ex-06
5	.43083333333ex 03	.57833333330ex 09	.744956772338ex-06
6	.38166666666ex 03	.76666666665ex 09	.497826086956ex-06
7	.34083333333ex 03	.65000000000ex 09	.524358974358ex-06
8	.32750000000ex 03	.88500000000ex 09	.370056497175ex-06
9	.32666666666ex 03	.90166666665ex 09	.362292051755ex-06
10	.51833333330ex 03	.80833333330ex 09	.641237113400ex-06
			.600785463585ex-06

**B. Subacute**

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
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Table 2 (continued)

HOST MEDIATED ASSAY  
INDIVIDUAL MOUSE DATACompound No.: 71-15 (GUM ARABIC)Organism: G-46Treatment: CONTROL (-)

## A. Acute

<u>Mouse No.</u>	<u>Ave. No. Mutant Colonies or Recombinants/ml</u>	<u>Ave. No. Colony Forming Units/ml</u>	<u>Mutation or Recombination Frequency</u>
1	.91666666665ex 01	.89166666665ex 09	.102803738317ex-07
2	.10000000000ex 02	.86666666665ex 09	.115384615384ex-07
3	.10000000000ex 02	.91500000000ex 09	.109289617486ex-07
4	.12500000000ex 02	.96833333330ex 09	.129087779690ex-07
5	.12500000000ex 02	.10450000000ex 10	.119617224880ex-07
6	.16666666666ex 02	.10433333333ex 10	.159744408945ex-07
7	.13333333333ex 02	.10283333333ex 10	.129659643436ex-07
8	.91666666665ex 01	.85333333330ex 09	.10742187500ex-07
9	.10000000000ex 02	.856666666665ex 09	.116731517509ex-07
10	.75000000000ex 01	.886666666665ex 09	.845864561655ex-08
			.117432688680ex-07

## B. Subacute

<u>Mouse No.</u>	<u>Ave. No. Mutant Colonies or Recombinants/ml</u>	<u>Ave. No. Colony Forming Units/ml</u>	<u>Mutation or Recombination Frequency</u>
			105

Table 2 (concluded)

HOST MEDIATED ASSAY  
INDIVIDUAL MOUSE DATA

Compound No.: 71-15 (GUM ARABIC)Organism: G-46Treatment: LOW**A. Acute**

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.15000000000ex 02	.541666666665ex 09	.276923076923ex-07
2	.11666666666ex 02	.686666666665ex 09	.169902912620ex-07
3	.20833333333ex 02	.80000000000ex 09	.260416666666ex-07
4	.18333333333ex 02	.10466666666ex 10	.175159235669ex-07
5	.18333333333ex 02	.69500000000ex 09	.263788968824ex-07
6	.25000000000ex 02	.11583333333ex 10	.215827338130ex-07
7	.13333333333ex 02	.67833333330ex 09	.196560196560ex-07
8	.91666665665ex 01	.80000000000ex 09	.114583333333ex-07
9	.83333333330ex 01	.52833333330ex 09	.157728706624ex-07
10	.12500000000ex 02	.90333333330ex 09	.138376383764ex-07
			.196926681910ex-07

**B. Subacute**

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
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Table 2 (continued)

HOST MEDIATED ASSAY  
INDIVIDUAL MOUSE DATACompound No.: 71-15 (GUM ARABIC)Organism: G-46Treatment: INTERMEDIATE

## A. Acute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.666666666665ex 01	.663333333330ex 09	.100502512563ex-07
2	.916666666665ex 01	.873333333330ex 09	.104961832061ex-07
3	.141666666666ex 02	.10016666666ex 10	.141430948419ex-07
4	.116666666666ex 02	.758333333330ex 09	.153846153845ex-07
5	.158333333333ex 02	.14416666666ex 10	.109826589595ex-07
6	.100000000000ex 02	.127000000000ex 10	.787401574803ex-08
7	.500000000000ex 01	.623333333330ex 09	.802139037437ex-08
8	.116666666666ex 02	.80166666666ex 09	.145530145529ex-07
9	.116666666666ex 02	.138333333333ex 10	.843373493973ex-08
10	.241666666666ex 02	.158166666666ex 10	.152792413066ex-07
			.115218200569ex-07

## B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency

Table 2 (continued)

HOST MEDIATED ASSAY  
INDIVIDUAL MOUSE DATACompound No.: 71-15 (GUM ARABIC)Organism: G-46Treatment: MAXIMUM

## A. Acute

Mouse No.	Ave. No. Mutant	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
	Colonies or Recombinants/ml		
1	.125000000000ex 02	.773333333330ex 09	.161637931035ex-07
2	.550000000000ex 02	.686666666665ex 09	.800970873788ex-07
3	.916666666665ex 01	.856666666665ex 09	.107003891050ex-07
4	.100000000000ex 02	.536666666665ex 09	.186335403727ex-07
5	.158333333333ex 02	.104166666666ex 10	.152000000000ex-07
6	.100000000000ex 02	.114000000000ex 10	.377192982456ex-08
7	.750000000000ex 01	.685000000000ex 09	.109489051094ex-07
8	.750000000000ex 01	.821666666665ex 09	.912778904667ex-08
9	.416666666666ex 01	.568333333330ex 09	.733137829915ex-08
10	.116666666666ex 02	.941666666665ex 09	.123893805309ex-07
			.189364192767ex-07

## B. Subacute

Mouse No.	Ave. No. Mutant	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
	Colonies or Recombinants/ml		